Abstract

As the COVID-19 pandemic intensified, there were increasing concerns about loneliness and isolation for people of all ages, but especially for those in older adult communities who are at increased risk for adverse health outcomes. A literature review and needs assessment were conducted to address the issue of loneliness in older adult communities. This informed the development of Virtual Companions, a national nonprofit aiming to reduce loneliness and foster intergenerational companionships through four virtual programs: PhonePal, PenPal, Cards & Crafts, and Virtual Concerts. These programs were piloted and evaluated in three diverse older adult communities: an under-resourced senior center, a community organization that delivers groceries to older adults living independently, and a government organization that serves older adults with chronic conditions. Through the pilot and feedback from experts, strategies to improve accessibility, engagement, and telepresence were identified. These strategies include providing technology and technology support, creating a centralized participant platform, implementing case-based training, and offering more opportunities for group interaction. Virtual Companions is currently adapting the *Stanford Presence 5* framework (evidence-based strategies

Keywords: Intergenerational, Presence, Volunteer, Older Adults, Communication

intergenerational interactions within Virtual Companions.

to improve physician-patient interpersonal connection) to enhance telepresence in the

Virtual Companions: Fostering Telepresence Between Generations During the COVID-19

Pandemic and Beyond

Presence is an essential component in human interaction and connection, one that is critical to establish community and enhance positive health outcomes in all populations. The unprecedented pandemic of COVID-19 intensified the need for presence to combat loneliness, with visitors restricted from nursing homes and social gatherings largely prohibited. Older adults living independently and those in senior residences are at a greater risk of loneliness as they face restrictions from interactions and activities, as well as isolation from other residents (Span, 2020). Isolation and lack of social interaction can lead to greater hospitalizations, heart disease, stroke, anxiety, depression, and accelerated cognitive decline (COVID-19 Healthcare Resilience Task Force, 2020; Flowers *et al.*, 2017; Murayama *et al.*, 2014; Span, 2020). In addition to an increased risk for COVID-19 and related complications, older adults lacked mental health support as group activities were canceled and staff were overwhelmed with physical health concerns and frequently changing safety protocols (Steinman *et al.*, 2020). To reduce the loneliness that the pandemic placed on older adults, discovering methods to instill greater connection and compassion through presence is critical.

The digital divide, the growing gap between those with technology access and those without, contributes to the risks associated with loneliness and isolation for older adults that are unable to use digital platforms to stay connected (Conger & Griffith, 2020). Despite the adverse outcomes associated with the digital divide, it presents an opportunity to uniquely evoke presence and help older adults become more comfortable with technology (Morrow-Howell *et al.*, 2020). With the understanding of the digital divide between older and younger generations as

both a challenge and opportunity for connection, Virtual Companions (VC), a non-profit organization, was developed to address the issue of loneliness by providing accessible services to older adults to promote positive health outcomes and foster companionships between generations. By connecting with more than 400 people across the country during the pilot phase, ranging from high school students to individuals over 100 years old, VC's programs have created a web of intergenerational support with sharing of life lessons and empathy. VC plans to incorporate lessons learned from the pilot in improved training, program participation, and future applications, as well as adapting the *Stanford Presence 5* framework, which outlines strategies to improve physician presence in patient-provider interactions, to intergenerational companionship (Zulman *et al*, 2020).

Background

Virtual Companions (VC) conducted a preliminary needs assessment and review of the existing literature to develop programs to address the increasing need for remote social interaction and presence during the COVID-19 pandemic. The needs assessment was modeled after the PRECEDE-PROCEED framework, which is a logic model that emphasizes community participation in health interventions and assesses societal factors influencing specific health issues (The Community Toolbox, 2020). The needs assessment included informal interviews with older adult communities to understand their specific needs, assets, and barriers. This process included over 100 informal interviews with staff, directors, caregivers, and older adults from nursing homes, senior centers, and organizations delivering free meals, groceries, and medications. These communities also varied in terms of technology access, level of care required by residents, languages spoken, staff bandwidth, and interest. Interview topics included general

concerns related to the pandemic, access to resources, current activities, and staff availability.

Interviewees re-emphasized the increasing problem of loneliness and mental health concerns due to limited staff support, canceled programming, and new safety protocols restricting visitors and social interactions within residences. Furthermore, the digital divide intensifies the isolation experienced by many older adults who do not have access to or comfort in using telephones or video-conferencing platforms.

The literature review delineated potential strategies to reduce loneliness and social isolation among older adults. Studies have shown that intergenerational programs, those that connect older and younger generations, can diminish feelings of loneliness by enhancing a sense of meaning for both generations as they connect with one another over common interests and through an array of activities (Belgrave, 2011; Murayama *et al.*, 2014). By interacting in intergenerational music concerts, older adults can experience feelings of reward, enjoyment, and usefulness, as well as improvements in their psychosocial well-being (Belgrave, 2011). In addition, the 12-concert Stanford Medicine Stuck @ Home virtual series brought together more than 3,000 people to connect over music and the arts during the pandemic. Participant comments reaffirmed music's ability to reduce feelings of loneliness and increase quality of life (Genovese, 2020).

After interviewing community leaders, nursing home staff, caregivers, and older adults about bringing virtual concerts and intergenerational programs like letter-exchanges and phone-call companions, one finding was the importance of harnessing the talents of older adults, while dismantling ageist perceptions about the 'elderly' and their 'limitations.' Another finding was that many older adults have the desire to make a meaningful impact in the lives of younger

generations. Other learnings included preference for longer-term companionships and the opportunity to participate in programs that account for different interests and access to resources. These interviews revealed each community's distinct needs, assets, and barriers, informing the development and adaptation of VC's programs and emphasizing the importance of accessibility.

Virtual Companions Programs

Virtual Companions (VC) was developed as a strategy to reduce loneliness for older adults and others who stand to benefit during and beyond the pandemic. Based on the findings from the literature review and needs assessment, VC follows a three-pronged approach: 1) intergenerational benefit, 2) incorporation of music and art, and 3) accessibility for all ages. This approach informed the development of each of the four programs: PhonePal, PenPal, Cards & Crafts, and Virtual Concerts. Through each of the VC programs, younger and older adults are both beneficiaries and givers of wisdom, talent, and conversation. To make these programs accessible for all ages, VC's "menu of options" works to break down barriers and allows participants to choose programs tailored to their specific needs.

PhonePal Program

The Virtual Companions PhonePal program serves as an opportunity for people who would not have met otherwise to connect and learn from each other through conversation and the sharing of life stories. To participate in the program, older adults are paired with a younger "phonepal" to safely engage in regular remote interactions and build genuine relationships during the pandemic and beyond. Phonepal pairs are set up to make a minimum of six weekly phone calls of at least 20 minutes each; however, many participants have much longer conversations, and the frequency of phone calls can vary by phone-pal availability. There are currently 24 older

and younger adults paired in the PhonePal program.

PenPal Program

The Virtual Companions PenPal program is an opportunity for people of different ages and backgrounds to connect and learn from each other through letter-writing. This program can be more accessible to those who may not have regular access to a telephone or feel more comfortable communicating via mail. In this program, older adults are paired with a younger adult to exchange at least six letters. To increase accessibility for this activity, participants receive financial assistance for postage and letter-writing supply costs. There are currently 46 older adults and young adults paired in the PenPal program.

Cards & Crafts Program

The Virtual Companions Cards & Crafts Program allows young adult participants to create one-time letters, cards, or crafts to be distributed to older adults throughout the United States. Older participants are encouraged to send cards and crafts to hospitalized children and healthcare workers. These uplifting and bright cards foster intergenerational acts of kindness and instill a sense of connection and joy. To date, over 250 cards and crafts have been distributed to older adults in five different states. In an effort to create a greater sense of community through this seemingly individual activity, participants also have the option to join a Crafting Collab or Holiday Workshop. The Crafting Collab is a virtual social event where participants create crafts and engage with one another over group video chat. The Holiday Workshop is a series of sessions designed to support participants as they learn and create crafts through a group video chat and are provided with a "crafting kit" with all necessary supplies to complete the craft. Both of these activities provide accessible opportunities for virtual social interaction and greater

presence in this time of isolation.

Virtual Concerts Program

The Virtual Companions Virtual Concerts (VCVC) program was created to harness the power of music and the arts to bring communities together and facilitate connection. People of all ages are welcome to perform or watch live Zoom or pre-recorded Youtube concerts. The first live concert was held over Zoom at an Alzheimer's memory care center, where VCVC performers shared their artistic talents and conversed with residents. The first VCVC concert cycle consisted of pre-recorded video compilations of talented artists, including musicians, poets, and dancers. These were streamed weekly on the VCVC YouTube channel, reaching 813 total viewers. Artists can submit their own performance videos to be featured in the concert, and concert performers also engage in a video chat interview to share their hobbies, memories, and other aspects of life during this time. Currently, there are 58 VCVC performers.

Program Evaluation and Preliminary Findings

The Virtual Companions (VC) project began in late March 2020 and engaged its first 100 participants by July 2020. Initial younger generation outreach consisted of contacting student groups on university campuses; however, there were also middle-schoolers, high-schoolers, and adults. Initial older generation outreach consisted of calling, emailing, and sending flyers to older adult communities, including nursing homes, senior centers, hospice and memory care centers, and organizations providing resources to independently-living older adults.

The four programs were piloted at three distinct sites: a senior center with low SES Spanish-speaking older adults, a community organization that delivers free groceries to older adults living independently or at a nursing home, and a government organization that serves

older adults with dementia, chronic pain, and other conditions. The initial partnership meeting allowed the specific community to share about the current challenges and concerns facing both the older adults and administrators as well as their access to resources. The community was informed of the VC programs and collaborated on how to tailor the programs to best support their needs. The PenPal and PhonePal programs were piloted at the senior center, with most of the pairs participating in the PenPal program since many older adults did not have access to a reliable phone service. The Cards & Crafts program was piloted with the organization delivering groceries to older adults, where a package of cards and crafts made by participants of the younger generations, was mailed to them with a flyer about VC's programs and contact information. For the government organization, additional training and protocols were established to ensure safety and comfort for both companions. Throughout the pilot period, older adults at these sites signed up for some or all of the other programs.

Lessons Learned

The VC programs were evaluated through three methods: feedback surveys from young adult participants; calls and emails with community directors, caregivers, and older adult participants; and consultations with experts in relevant industries. For the PhonePal program, younger phonepals are required to fill out a feedback survey after each phone call. Participants can fill out a general feedback survey for the other three programs at any point during their participation. These surveys use qualitative and quantitative measures to assess participant experience, challenges, areas of improvement, and level of engagement. Emails and phone calls with experts, community leaders, and older adult participants influenced the development of methods to increase connectedness and presence, as well as evaluate the impact of the programs

on older participants. These experts work in healthcare, longevity research, public service, and user experience research.

Three main themes emerged from young adult participants' surveys: excitement over their connections and discovered similarities, concerns over how to address initiating the first conversation and potential challenges, and lower engagement and retention among those who waited longer to receive a match. According to the interest surveys, the main reason young adults decided to participate in VC programs was their desire to meaningfully connect with the older generation during these isolating times. Many older adult participants expressed appreciation and excitement over these interactions. For the organization delivering groceries to older adults, it was common for older adults to request participating in a few programs before selecting one or proposing a hybrid.

Through the pilot, adaptations were made to programs and outreach methods as barriers were encountered in different communities. To address language barriers, printed and online materials were translated in languages requested by participants, and representatives who could speak those languages were appointed to provide support over the phone. To address technology barriers, a Tech Support committee was formed to provide participants with the technology and assistance required for program participation. To enhance longer-term engagement and foster more meaningful connections in a virtual setting, healthcare and service leaders offered strategies to streamline sign-up, training, and participation, as well as best practices for participants to be present with their companion and address potential challenges.

Future Directions

In order to address the concerns and suggestions revealed in the pilot evaluation, a new

training, check-in system, and participant platform will be implemented. The new training curriculum and monthly check-in will provide strategies for participants to improve communication and presence with their virtual companions. These check-ins will serve as a space for participants to share practices for addressing hypothetical technology and mental health-related challenges, with advising from community experts and institutional partners. The participant platform will centralize and streamline the program registration and participation process, as well as allow participants to personalize their Virtual Companions (VC) experience and share their connections.

The *Stanford Presence* 5 (P5) evidence and narrative-based practices designed to enhance physician presence and meaningful connection with patients in the clinical encounter will be used to adapt the PhonePal training. The P5 team implemented these practices by conducting *Stanford Presence Circles*, which are discussion groups for clinicians to share and reflect on the P5 practices and their own strategies for fostering presence in patient-physician interactions, as well as setting personal intentions and goals for moving forward. The P5 practices were adapted to telemedicine through literature review and clinician feedback (Shankar *et al.*, 2020).

Incorporating the P5 telepresence practices as a framework, strategies will be developed for participants to form deeper connections with their companions. VC will conduct a literature review and incorporate findings from experts and the pilot to create guidelines for enhancing telepresence in intergenerational interactions. The monthly check-ins will be designed and implemented akin to the *Stanford Presence Circles* to address challenges encountered in companion interactions, share strategies for increasing presence, and provide another avenue of social interaction. See *Figure 1* for a visual of the VC Project Timeline.

Conclusion

The need for remote volunteering has increased due to the isolation brought on by the COVID-19 pandemic; however, the use of this method of interaction may extend well beyond the pandemic to increase accessibility of presence. Prior to the pandemic, older adults were already disproportionately affected by lack of social interaction and isolated living arrangements (National Academies of Sciences, Engineering and Medicine, 2020). In-person volunteering can be more time-consuming, costly, and is often limited by geographic region, while remote volunteering facilitates safer social interactions, greater flexibility and reach, and opportunities for older adults to improve their digital skills (Morrow-Howell et al., 2020). Based on the literature and lessons learned through the Virtual Companions pilot, other organizations implementing remote volunteering in their programs should consider the following: what resources target communities have access to, how to provide technology access and support to participants, outreach methods that overcome language and technology barriers, and strategies for increasing presence in remote interactions. The pandemic has increased awareness and invigorated those working towards combating loneliness, the digital divide, and prejudices against the older generation. Virtual Companions will continue to seize this opportunity to increase intergenerational presence and connectedness among participants across the US.

References

- Belgrave, M. (2011). The effect of a music therapy intergenerational program on children and older adults' intergenerational interactions, cross-age attitudes, and older adults' psychosocial well-being. *Journal of Music Therapy*, 48(4), 486-508. doi:10.1093/jmt/48.4.486
- The Community Toolbox (2020). Section 2 PRECEDE/PROCEED. Retrieved from https://ctb.ku.edu/en/table-contents/overview/other-models-promoting-community-health
 -and-development/preceder-proceder/main
- Conger, K., & Griffith, E. (2020). As Life Moves Online, an Older Generation Faces a Digital

 Divide. Retrieved from

 https://www.nytimes.com/2020/03/27/technology/virus-older-generation-digital-divide.ht

 ml
- COVID-19 Healthcare Resilience Task Force (2020). Managing the effects of social distancing in older adults during COVID-19. Retrieved from https://files.asprtracie.hhs.gov/documents/managing-the-effects-of-social-distancing-in-older-adults-during-covid-19.pdf
- Flowers, L., Houser, A., Noel-Miller, C., Shaw, J., Bhattacharya, J., Schoemaker, L., & Farid, M. (2017). Medicare spends more on socially isolated older adults. *Insight on the Issues*, (125). doi:10.26419/ppi.00016.001
- Genovese, J. (2020). Stanford Medicine Stuck@Home Concerts: Emotional PPE for unprecedented times: Stanford Live. Retrieved from https://live.stanford.edu/blog/july-2020/stanford-medicine-stuckhome-concerts-emotional

-ppe-unprecedented-times

- Morrow-Howell, N., Galucia, N., & Swinford, E., (2020). Recovering from the COVID-19 pandemic: A focus on older Adults. *Journal of Aging & Social Policy*, 32(4-5) 526-535, doi: 10.1080/08959420.2020.1759758
- Murayama, Y., Ohba, H., Yasunaga, M., Nonaka, K., Takeuchi, R., Nishi, M., Sakuma, N., Uchida, H., Shinkai, S., & Fujiwara, Y. (2015). The effect of intergenerational programs on the mental health of elderly adults. *Aging Ment Health.* 19(4), 306-314. doi:10.1080/13607863.2014.933309
- Shankar, M., Fischer, M., Brown-Johnson, C., Safaeinili, N., Haverfield, M., Shaw, J., Kelly, M., Miclau, T., Garcia, R., De Leon, G., & Zulman, D., (2020, June). Development of TelePresence5: Practices to foster humanism in telemedicine. Oral presentation delivered at the ACH Healthcare Communication Virtual Research Forum.
- Span, P. (2020, April). Just What Older People Didn't Need: More Isolation. Retrieved from https://www.nytimes.com/2020/04/13/health/coronavirus-elderly-isolation-loneliness.htm
- Steinman, M., Perry, L., Perissinotto, C. (2020). Meeting the care needs of older adults isolated at home during the COVID-19 pandemic. *JAMA Internal Medicine*, *180*(6):819-820. doi:10.1001/jamainternmed.2020.1661
- Zulman, D. M., Haverfield M. C, Shaw, J. G., et al. (2020). Practices to Foster PhysicianPresence and Connection With Patients in the Clinical Encounter. JAMA, 323(1), 70–81.doi:10.1001/jama.2019.1900

Figure 1

Virtual Companions Project Timeline

