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School of Occupational Therapy

Virtual Group Occupational Therapy for Homebound Veterans and Their Caregivers

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A Capstone Project Entitled

Virtual Group Occupational Therapy for Homebound Veterans and Their Caregivers

Submitted to the School of Occupational Therapy at University of Indianapolis in partial fulfillment for the requirements of the Doctor of Occupational Therapy degree.

By

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Abstract

Homebound older adults are at an increased risk for depression, anxiety, and loneliness with limited opportunities to access the community and social gatherings. Telehealth increases access to care while eliminating transportation time and costs. Group therapy maximizes the opportunities for social participation and social support to reduce feelings of loneliness. This study aimed to determine if virtual group therapy is a feasible and effective method to provide occupational therapy services to local homebound veterans. Two veterans receiving home-based primary care services and one caregiver consistently attended a virtual group occupational therapy pilot program targeting health management and social participation at the Cincinnati VA. Qualitative and quantitative analysis indicated positive outcomes related to social participation, physical activity, and caregiver support following participation in the pilot program. The results support virtual group therapy as an effective method for client-centered occupation-based interventions for homebound older adults and their caregivers.

Keywords: telehealth, group therapy, homebound, veteran, older adult, caregiver, health promotion, social participation

Virtual Group Occupational Therapy for Homebound Veterans and Their Caregivers

Approximately 75% of older adults live with multiple chronic conditions contributing to decreased health-related quality of life (QOL) and reduced occupational performance (Berger et al., 2018). Leaving home may not be possible, safe, or practical to engage in occupations for older adults with complex medical needs, resulting in a homebound lifestyle. Homebound older adults are at an increased risk for depression resulting in increased feelings of loneliness and decreased social participation and activity engagement (Garabrant & Liu, 2021). Limited engagement in occupation and social isolation can increase feelings of depression, loneliness, and anxiety (Garabrant & Liu, 2021; Xiang & Brooks, 2017).

As America's most extensive integrated health care system, the Veterans Health Administration (VHA) prioritizes quality and prompt services to its nine million enrolled Veterans (*Veterans Health Administration*, n.d.). The Department of Veterans Affairs is a trailblazer in home-based primary care (HBPC), running the most extensive HBPC program in the U.S., serving approximately 59,000 homebound veterans annually (Schuchman et al., 2018). The HBPC program provides interdisciplinary services to veterans and their families through in-home and virtual visits (J. Kennedy, personal communication, May 2021). The Cincinnati VA has six HBPC teams with three total occupational therapists (J. Kennedy, personal communication, May 2021). Occupational therapists in the HBPC program evaluate veterans' activities of daily living (ADLs), instrumental activities of daily living (IADLs), and functional and community mobility (J. Kennedy, personal communication, May 2021). Veterans within HBPC have complex medical needs that challenge their ability to leave their homes safely; therefore, interdisciplinary care team members provide in-home visits to ensure fair and equal access to healthcare.

This program development project involved a collaborative effort between the HBPC occupational therapists and the program developer to develop a virtual group occupational therapy class to promote social participation and health management for homebound veterans. Occupational therapists support individuals, groups, and populations in maximizing their participation in life through engagement in occupation and health promotion (AOTA, 2020). Evidence supports group occupational therapy interventions as an effective method to promote wellness in older adults (O'Brien & Solomon, 2021). Furthermore, participants of group occupational therapy interventions found positive meaning and enjoyment through involvement in the group (O'Brien & Solomon, 2021).

The mission of the Cincinnati VAMC is to "offer options to timely, quality services for Veterans through care and respect for one's physical, psychological, and spiritual health" (*VA Cincinnati Health Care*, n.d.). This paper will discuss how the program development project supports this mission through a virtual group occupational therapy class.

Background

Population: Homebound Older Adults

Older adults are at an increased risk for developing chronic conditions that limit their ability to engage in occupations (Berger et al., 2018). The incidence of multiple chronic conditions can make it challenging for individuals to leave their homes to safely participate in daily activities (Berger et al., 2018). Medicare considers individuals *homebound* if they meet the following two criteria: 1) Rely on the help of another person or medical equipment to leave their home, or their doctor believes their health or illness could worsen if they leave their home. And 2) have difficulty leaving their home and typically cannot do so (Medicare Interactive, 2017). According to Reckrey et al. (2020), "there are an estimated 2 million older adults in the United

States who never or rarely leave the home, with an additional 5.3 million older adults who leave home only with assistance or with significant difficulty" (p 2). Occupational disengagement and a sedentary lifestyle can exacerbate illness and introduce new medical issues, such as depression, obesity, and chronic pain (Park et al., 2020). Approximately 43.9% of homebound adults experience depression (Xiang & Brooks, 2017), resulting in increased feelings of loneliness and decreased social participation and activity engagement (Garabrant & Liu, 2021).

Occupational Therapy and Home-Based Primary Care

Cheng et al. (2020) emphasize improving healthcare delivery for homebound individuals through home-based primary care (HBPC). Several studies have shown HBPC to dramatically improve the quality of life of homebound individuals and their caregivers (Schuchman et al., 2018). The VA HBPC program is the largest in the nation, with over 300 HBPC teams (Schuchman et al., 2018). The VA HBPC program offers interdisciplinary team-based in-home support for veterans with severe chronic diseases and disabling conditions that interfere with daily activities and overall health and wellness (Schuchman et al., 2020; *HBPC - Geriatrics and Extended Care*, n.d.).

Occupational therapists are essential members of the HBPC interdisciplinary team, offering skilled insights into the veterans' occupational performance within the home context (AOTA, 2020). Occupational therapy aims to support individuals in life through engagement in occupation (AOTA, 2020). Wilcock and Hocking (2015) support the benefit of engagement in occupation to improve a person's health and wellbeing. Due to the nature of primary care, HBPC occupational therapists see their patients quarterly or as needed for evaluation and reevaluation of occupational performance within the home setting (J. Kennedy, personal communication, May 2021). Garabrant & Liu (2021) suggest that occupational therapists consider providing

interventions to facilitate social participation and activity engagement when working with rural homebound older adults with depression. Furthermore, Berger et al. (2018) encourage healthcare practitioners to provide health promotion, maintenance, and management interventions to address the adverse effects of chronic conditions. Occupational therapists foster the skills to appropriately adapt, modify, and grade the intervention to maximize participation within the home environment and virtual context (AOTA, 2020).

Telehealth

Telehealth is an emerging service delivery model that has become increasingly popular in response to the COVID-19 pandemic. Sclarsky and Kumar (2021) support telehealth as an effective delivery model for occupational therapy for community-dwelling adults. Additionally, telehealth services increased patient satisfaction rates in rural communities by improving access to healthcare services while reducing transportation and therapy costs, according to Patterson et al. (2021). HBPC providers at the Cincinnati VA can provide virtual home visits using VA Video Connect (VVC) (J. Kennedy, personal communication, May 2021). VVC is a reliable and secure telehealth platform that allows veterans real-time access to their healthcare team "through live video on any computer, tablet, or mobile device with an internet connection" (*VA Video Connect*, n.d.). If a veteran does not have an existing compatible device, the VA will issue a VVC capable iPad to increase access to care (J. Kennedy, personal communication, May 2021).

Group Occupational Therapy

Thayer and Anderson (2018) report that physical isolation and depression increase loneliness, whereas a robust social network, weekly or more contact with friends, and more frequent participation in hobbies and clubs decrease loneliness. Evidence supports group

occupational therapy interventions as an effective method to promote wellness in older adults while promoting meaning and enjoyment for the participants (O'Brien & Solomon, 2021).

The Program Development Project

Virtual group therapy allows occupational therapists to promote social participation and health promotion amongst homebound older adults. Additionally, it increases the efficiency and volume of visits for the occupational therapist by eliminating transportation time and maximizing patient involvement. By participating in group sessions, individuals expand their social network, connect with others who share similar experiences, and participate in community activities (AOTA, 2020). A virtual occupational therapy group class through the Cincinnati VA HBPC increases opportunities for homebound veterans to expand their social network, participate in health management activities, and engage in meaningful occupations.

Theoretical Framework

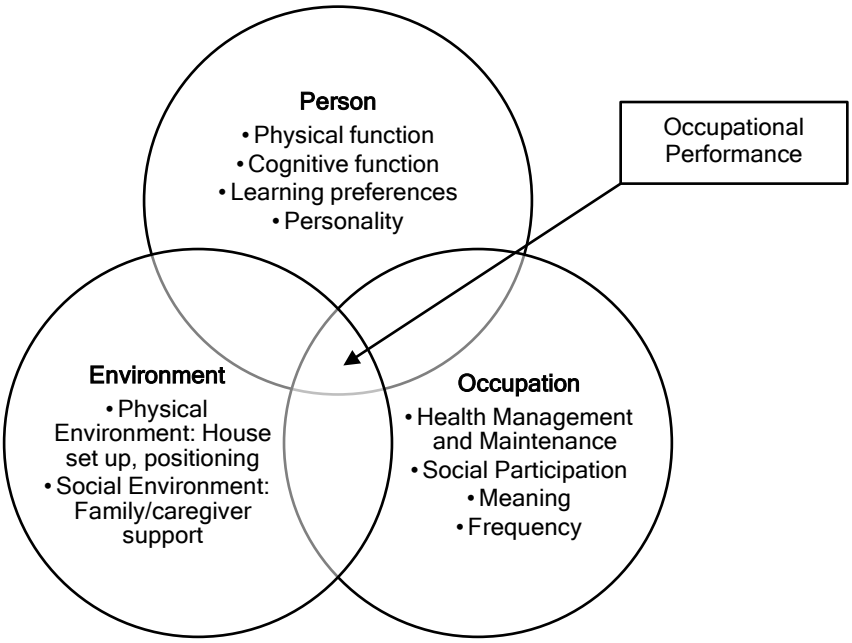
Person-Environment-Occupation Model

The Person-Environment-Occupation (PEO) Model guided the initiation and advancement of the program development project to ensure client-centeredness. There are three components to the model: the person, the environment, and the occupations (Law et al., 1996). The PEO Model states that the interaction of the person, the environment, and the occupation facilitates participation (Law et al., 1996). A good fit of the three constructs supports meaningful participation; however, a poor fit can reduce engagement or performance in occupation (Law et al., 1996). Homebound veterans may experience disruptions to each component of the PEO Model, threatening overall occupational performance and participation. Social participation and health management can be especially challenging to maintain good fit due to the difficulty accessing community centers and health clinics. Focusing on improving the fit of the person,

environment, and occupation will promote enhanced occupational participation and performance for homebound veterans. Figure 1 illustrates how the PEO Model aligns with developing a virtual group occupational therapy class for homebound veterans to promote occupational participation.

Figure 1

Person-Environment-Occupation Model



Note. Adapted from Law et al., 1996, p. 18.

Project Design and Implementation

The initial phase of the program development project included a needs assessment and strengths, weaknesses, opportunities, and threats (SWOT) analysis (See Appendix A) to increase familiarity with the site and recognize areas for improvement. The needs assessment involved several weeks of observations (Table 1) and conversations with stakeholders associated with the Department of Veterans Affairs to strengthen knowledge of existing programs. The program developer kept field notes throughout the various experiences to track notable information and

findings. The SWOT analysis provided insight into strengths, weaknesses, opportunities, and threats that guided the area of focus for the program development project.

Table 1

Observation Schedule

Class Name	Type of Class	Context	Duration	Leader
Warrior Beat Drumming	Leisure	Telehealth (VVC)	60 min	COTA
Group on Trust	Mental Health	Telehealth (VVC)	60 min	Psychologist
Power Hour	Group Exercise	Telehealth (VVC)	60 min	Physical Therapist
Tai Chi	Group Exercise	In-Person	60 min	Physical Therapist

Note. VVC= VA Video Connect, the telehealth platform through the Department of Veterans Affairs

Methods

A modified clinical improvement model provided structure to the planning and implementation process of program development. Splaine (2012) outlines four key questions to drive improvement in clinical practice. The program developer used the steps delineated by Splaine (2012) to develop a pilot program to improve occupational participation with homebound veterans (Table 2). The pilot program functioned as a virtual group occupational therapy class targeting health management and social participation. Inclusion criteria for participation in the pilot program included actively receiving home-based primary care services through the Cincinnati VA and having VVC (telehealth) capability. Caregiver involvement was encouraged but not necessary for participation in the virtual occupational therapy group class. The program developer drafted an outline of the class using insights from the literature and observation experiences, then presented the idea to the interdisciplinary home-based primary

care team. The interdisciplinary team members provided feedback and suggestions for recruitment and implementation.

Table 2

Four Steps to Clinical Improvement

Splaine (2012)	Program Development Project
Step 1: Outcomes: *What is the general aim of this work, and who are we trying to help?*	**General Aim:** Improve occupational participation (social participation, and health management) for homebound veterans in their home environment. **Target population:** Homebound Veterans
Step 2: Process: *What is the process for giving care to this type of patient?*	**Process:** HBPC occupational therapists visit quarterly or as needed for occupational therapy services through virtual or in-home visits.
Step 3: Change: *What ideas do we have for changing what is done (the process) to get better*	**Change:** Offer group occupational therapy sessions via telehealth to facilitate occupational participation and increase the frequency of care.
Step 4: Pilot: *How can we pilot test an improvement idea?*	**Pilot:** Occupational Therapy Doctoral Student leads a month-long virtual group to trial group occupational therapy class to promote occupational participation with homebound veterans.

Note. Table adapted from Splaine, 2012, Chapter 3: Improving Clinical Care p. 23

Recruitment

The program developer and HBPC occupational therapists shared a protected excel sheet to track veteran referrals. The occupational therapists referred appropriate participants from their respective teams and provided contact information and additional notes as necessary. The program developer contacted appropriate veterans and educated them on the pilot program. Nine veterans confirmed interest in the pilot class; however, five total veterans attended the class.

Supporting Material

The program developer created a virtual presentation to share during the class that included large print, contrast, and visual guides to maximize accessibility and participation. Though the presentation increased the accessibility of the class, it limited flexibility and

adaptability during the class. The presentation was discontinued halfway through the pilot program to maximize the adaptability and client-centeredness of each class.

The program developer utilized existing VA documentation templates to design a comprehensive but concise documentation template for the pilot program. The documentation template was designed to remain consistent with other VA occupational therapy notes to ensure readability and carryover in the future. The template included statements of virtual security, consent to virtual and group therapy, emergency contact information, and SOAP format documentation.

Class Layout

The pilot class ran for four weeks, offering two group sessions per week. Due to medication schedules, sleep schedules, and caregiver support, it was determined that a late morning class would be the most appropriate time to maximize attendance. Each class session ran approximately 60 minutes, allowing time to accommodate technological issues. The program developer contacted each interested veteran starting one hour before the class to confirm attendance for that day. The class began with introductions and prompted discussions to encourage social participation and to learn about the participants. Health and wellness education drove the next section of the class focusing on strategies to improve overall well-being (breathing techniques, stress management, mindfulness, etc.). The most significant portion of the class, lasting about 30 minutes, focused on maintenance exercise activities. The program developer guided the veterans and their caregivers through seated upper extremity exercises and stretches to promote endurance, strengthening, and joint mobility for increased occupational participation. The group class concluded with guided mindfulness targeting stress management, pain management, and breathing awareness.

Challenges

The process of joining a group call on VVC differed from the typical process of accessing an individual call which created initial confusion and frustration for the participants. The program developer and one of the HBPC occupational therapists completed home visits and telephone calls to educate the participants on strategies to access the group classes to reduce further issues. Other challenges included veterans who noted interest and then could not attend due to the inability to make contact, sudden hospitalization, or lack of caregiver assistance at the time of class.

Telehealth etiquette became a challenge for individuals who did not know how to properly mute their microphone or video when they needed to tend to something in their home. Background noise such as telephones ringing and people talking would disrupt the group and interfere with the progression of the class. Appropriate clothing also became an issue for participants who lacked awareness of their video broadcasting. Understanding appropriate behaviors and knowing how to operate the telehealth system were learned to be essential skills for successful participation in the virtual group therapy class.

Successes

Caregivers were encouraged to participate in the group sessions to maximize education and carryover in the home. One caregiver attended the class consistently in an active observer role. The caregiver requested handouts of the exercises performed through the class to use at home between class sessions. The program developer created a handout (See Appendix B) with visual and written instructions on how to complete the exercises.

Music became an integral part of the maintenance exercise section to increase enjoyment and encourage overall participation. The program developer choreographed the warm-up

exercises to rhythmic beats of popular songs (i.e., Eye of the Tiger, We Will Rock You). The program developer requested song suggestions from the participants, promoting more meaning and client-centeredness throughout the group class. Music became a central theme in social discussions and allowed the participants to find shared interests and learn more about one another's music tastes.

Project Outcomes

Data collection

After participation in the pilot group therapy class, participants and caregivers participated in an online focus group to discuss their experiences. Attendance of at least two classes was required to participate in the focus group to ensure reliability and validity of data. To strengthen the data, each participant who attended more than one class completed a retrospective pretest-posttest survey to gather insight related to veteran-perceived outcomes. Pretest-posttest statements were directly related to the Occupational Therapy Practice Framework 4th Edition (OTPF-4) to ensure occupation-based data. Four satisfaction statements gauged participant satisfaction related to various contexts of the pilot program. A mixed-methods approach strengthened the validity and reliability of data collection while expanding the "inquiry with sufficient depth and breadth." (Dawadi et al., 2021, p. 27). Open-ended qualitative information complemented the close-ended quantitative data to enrich the overall findings of the experiences of the group participants (Dawadi et al., 2021).

Quantitative

The program developer designed a retrospective pretest-posttest survey (See Appendix C1) to measure patients' self-rated participation in target occupations before and after involvement in the group therapy class. The retrospective design allowed participants to gauge

the degree of change they experienced with "greater awareness and precision than a traditional pretest-posttest design" (Little et al., 2020, p. 175). A five-point Likert scale allowed the participants to rate the degree to which they agreed, disagreed, or remained neutral with statements. This design allowed for a greater understanding of the participants' opinions related to the prompt.

Qualitative

A focus group encouraged descriptive, discussion-based communication amongst group members regarding their overall experiences with the group therapy class. According to Dawadi et al. (2021), focus groups increase the depth of the research inquiry through more profound insight into the phenomenon from narratives. To reduce the potential for bias, the focus group moderator was a Cincinnati VA occupational therapy staff member who had no relation to the participants or the group class. The focus group was conducted online using VVC, the same telehealth platform used to access the group therapy class, to ensure ease and consistency. Thirteen open-ended prompts (See Appendix C2) encouraged discussion and probed themes throughout the focus group.

Data Analysis

Retrospective Pretest-Posttest Survey

The most significant participant-rated improvement directly related to participation in the group OT class was physical activity and peer group participation. These results are consistent with the primary goals of the group to promote health management and social participation for homebound veterans. Table 3 includes the average patient-rated change in each target occupation and the average satisfaction rating for each satisfaction statement.

Table 3

Retrospective Pretest/Posttest Survey Results

Occupation	Average Change
Peer Group Participation	**+1**
Community Participation	NO CHANGE
Physical activity	**+3**
Social and emotional health promotion and maintenance	NO CHANGE

Satisfaction Statements	Average Rating
I am satisfied with the care I received through the group occupational therapy class.	**5/5**
I enjoy using telehealth (VVC) to receive occupational therapy.	**5/5**
I enjoy participating in groups for occupational therapy.	**5/5**
I enjoy meeting new people through telehealth group occupational therapy.	**4.5/5**

Note. Results based on the feedback of two veteran participants, caregivers did not complete the survey.

Focus Group

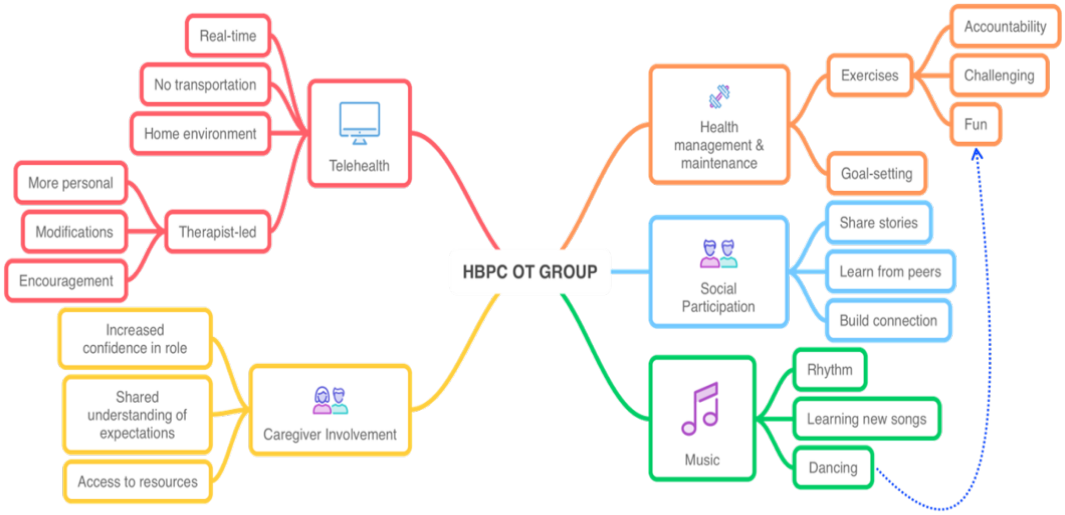
The program developer analyzed the focus group data using a thematic analysis involving coding and identifying themes from the focus group discussion (Clarke et al., 2015). The program developer used Otter.ai, an iPhone application, to audio record and transcribe the focus group. Clarke et al. (2015) outline six phases of thematic analysis:

1. Familiarization with the data.
2. Coding the data.
3. Searching for themes within the themes.
4. Reviewing themes.
5. Defining and naming themes.
6. Writing the report.

The program developer reviewed and edited the transcripts to accomplish phase one of the 6 phases of thematic analysis (Clarke et al., 2015). Continuing through the steps, the program developer coded the data and condensed the codes into themes. The program developer used Mind Node (2021) to visualize the themes and make several adjustments before defining and naming the data (Figure 2).

Figure 2

Mind Map of Thematic Analysis



Note. Mind Map created using Mind Node (2021).

Themes

Home but not Bound

The participants appreciated being involved in the class from the comfort of their own homes due to the complex nature of their health that limits their ability to leave their houses. "I appreciate the group online because I can do it at home." The participants emphasized the value of accessing conversations, social support, and group comradery through the group therapy class. One participant explained how the virtual environment felt normal due to the real-time

connection. “It’s almost in person anyway because you can see everyone doing the exercises all together.” The participants valued the real-time coaching and encouragement from the program developer, stating that it was “more personal” than watching a video. Virtual group therapy provides a platform for individuals to come together from their home environment and support one another in reaching their goals.

We Got the Beat

Participants endorsed music as one of the most enjoyable and interactive components of the virtual group therapy class. When asked about their favorite part of the class, one participant said, “it all goes back to music.” The participant elaborated that music increased their engagement in the group class by giving them a role in choosing the music. Additionally, the participants agreed that they would spend time outside of the group class thinking about songs to suggest and researching music history to share with the group, thus engaging in leisure occupations. The participants enjoyed the songs with more drumbeats and rhythmic music since it was easier to follow along and anticipate the movement. One participant said, **“**I like watching other people enjoying themselves. I love that. I really got a lot out of it for that reason, other than really enjoying the experience.” Music encouraged participants to express themselves by dancing and singing throughout the exercise portion of the class. The participants agreed that music increased the energy, engagement, and enjoyment of the group occupational therapy class.

Caregiver Involvement

Role confidence of the caregiver was reported to be a significant outcome of the group occupational therapy class. The caregiver provided valuable insight into their perspective of the class from an observer role.

> "It [the group class] has been very enjoyable for all of us, me included, and I just kind of sat, listened, and watched but it helped me to help [the veteran] later on and now I know how to do these things and I can get him to do them and know that he's doing it right or not. So yeah, it was very good for all of us."

The transparent and real-time relationship between the caregiver, participant, and program developer allowed for a shared understanding of expectations. Furthermore, the caregiver requested resources and educational materials through the virtual group class that they noted to be beneficial for carryover in the home. The caregiver's involvement in the group allowed for opportunities to increase the carryover of skills and activities in the home while increasing role confidence of the caregiver.

Social Participation

Participants appreciated the opportunity to connect with others who have shared experiences through involvement in the group occupational therapy class. The participants reported looking forward to sharing stories and learning from one another during the class. In addition to enjoying the conversations and learning about one another, they also reported improving their social skills. One participant explained how the telehealth platform challenged and improved their listening skills, "Discussion was really interesting, I learned quite a bit and I'm a much better listener now I've come to realize."

Summary

The incidence of multiple chronic conditions in older adults can contribute to complex medical issues that make it challenging for individuals to safely leave their homes. Homebound older adults are at an increased risk for depression resulting in increased feelings of loneliness and decreased social participation and activity engagement (Garabrant & Liu, 2021). Telehealth

increases access to care while eliminating time and costs associated with transportation for the patient and the practitioner. Furthermore, group therapy is an effective intervention method to promote wellness and facilitate social participation in older adults to reduce feelings of loneliness and depression.

A pilot program at the Cincinnati VA supports virtual group occupational therapy services as an effective and enjoyable method to promote health management and social participation among homebound veterans. Quantitative and qualitative data analysis support the implementation of virtual group therapy in home-based primary care to increase access and frequency of client-centered care. Participants endorsed telehealth as an effective, real-time, and client-centered alternative to in-person therapy sessions. Furthermore, consistent caregiver involvement in the group class increased confidence in the caregiving role and improved carry over into the home. Future implications involve expanding group therapy services across other disciplines (physical therapy, recreation therapy, dietetics, psychology, etc.) and exploring more domains within the occupational therapy scope of practice.

Conclusion

The program development project contributed rich insight into virtual group occupational therapy to promote health management and social participation among homebound veterans. The Cincinnati VA Home-Based Primary Care team has gained awareness of the advantages of virtual group therapy to meet their clients' individual needs, involve the caregiver in the care plan, and offer more frequent client-centered services. The interdisciplinary team members on the HBPC team have access to resources and guides to continue or create group therapy in their practice.

Occupational therapy practitioners should explore opportunities to use telehealth to increase the frequency and quality of care for homebound older adults. Additionally, occupational therapy practitioners should explore group therapy as a service delivery model for patients who lack adequate social participation. Lastly, more research on the role of occupational therapy for homebound older adults and their caregivers should be completed to better understand how to serve this growing population of homebound older adults.

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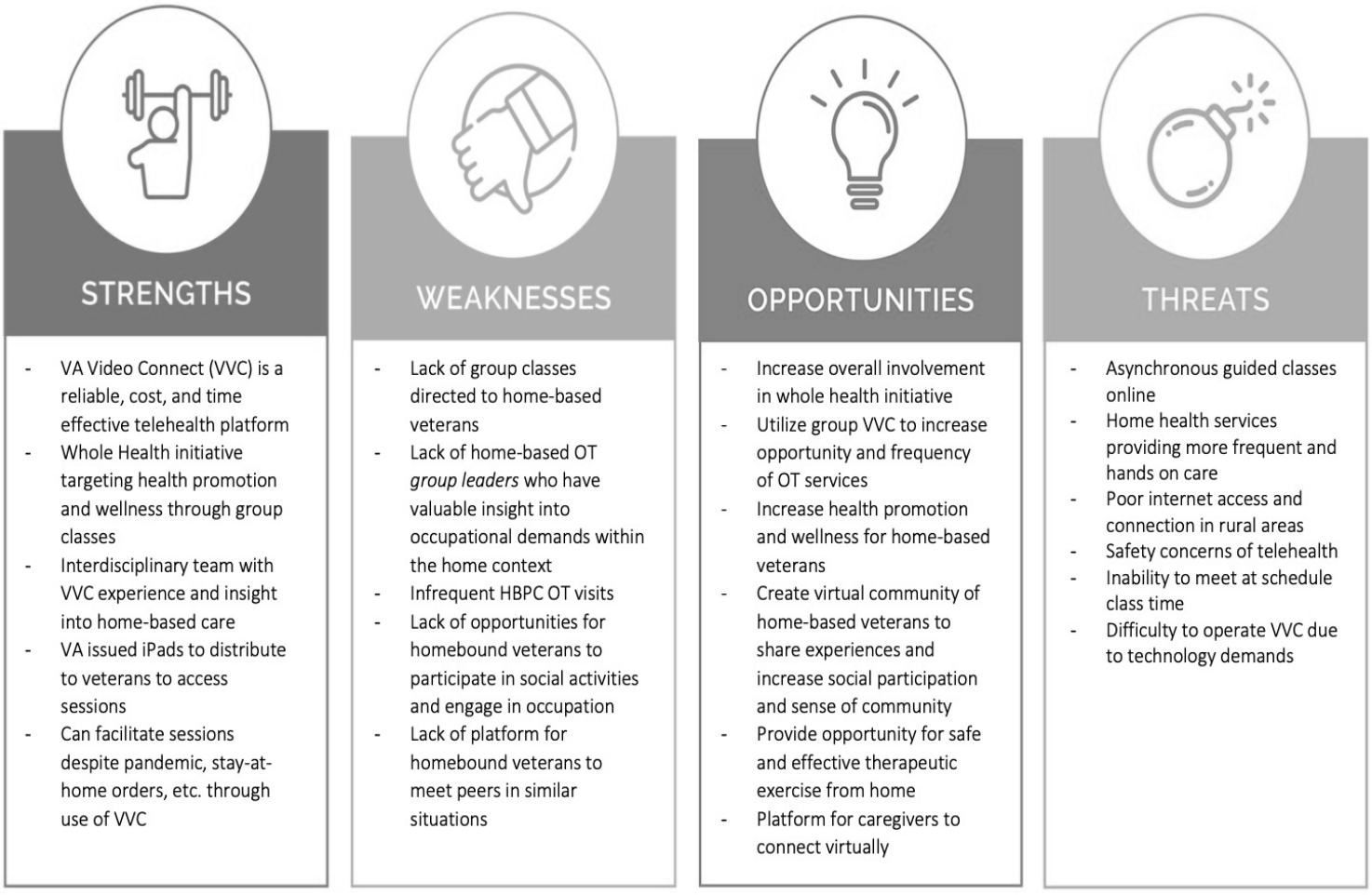
Appendix A

SWOT Analysis

The program developer completed a SWOT analysis to gain insight into the strengths, weaknesses, opportunities, and threats within the Cincinnati VA Home-Based Primary Care service. This guided analysis allowed the program developer to better understand how to develop a program to best meet the needs of the site.

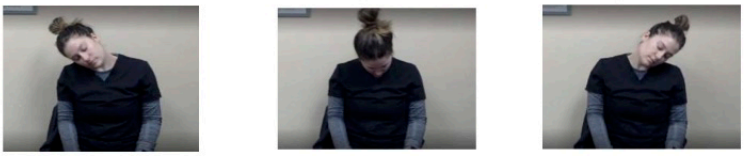


Appendix B

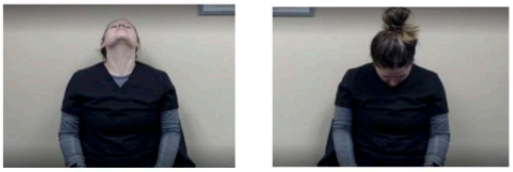
Upper Extremity Exercise Handout

Warm up/Cool down

Neck Rolls: Sit up tall. Start with your chin down, right ear to right shoulder, look up, left ear to left shoulder, chin down. Complete 4 rotations each way.

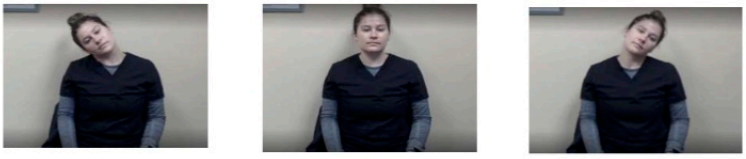


"Yes": Slowly nod your head as if you were saying "Yes." Sit up tall. Start with your head at neutral, look up, then bring your chin down to your chest. Complete 5 each direction.

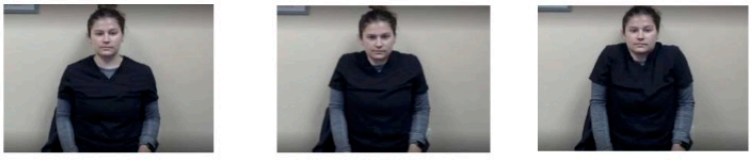


"No": Slowly shake your head as if you were saying "NO." Sit up tall. Start with your head at neutral, look over your right shoulder, bring your head back to neutral, then look over your left shoulder. Complete 5 each direction.

Ear to shoulder: Sit up tall. Start with your head at neutral, bring your right ear to your right shoulder. Bring your head back to neutral, then bring your left ear to your left shoulder. Complete 5 each way.



Shoulder rolls: Sit up tall. Bring your shoulders to your ears, then roll them forwards and down. Squeeze your shoulder blades together and bring your shoulders back to your ears. Complete 8 then switch directions.

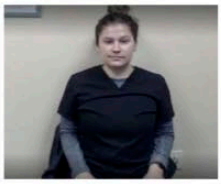


Seated Upper Body Exercises

Arm circles: Sit up tall. Bring your arms out to your side until they are parallel with the ground. Move your arms in a circular motion for 30 seconds, switching directions halfway.



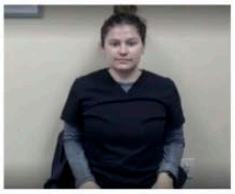
BIG Y: Sit up tall. Start with your hands on your lap. Bring your arms over your head and open wide making a "Y." Bring your arms back to your lap and repeat 10 times.



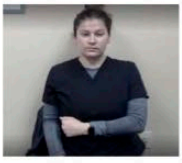

Diagonals: Sit up tall. Start with your hands together at your chest. Bring one arm over your head, and one arm down to your side. Bring hands back together and alternate arms. Repeat for a total of 10 times.




"11's": Sit up tall. Start by resting your hands on your lap. Bring your arms straight over your head making a number "11." Bring your arms back to your lap. Repeat 11 times.




Door hinges: Sit up tall. Bend your elbow 90 degrees. Start with your arm across your abdomen. Keep your elbow tucked to your side, rotate your arm out to the side like you are opening a door. Bring your arm back to starting position. Repeat 5 times then switch arms.




Chicken wing: Sit up tall. Bring your hands behind your head, then bring your elbows together. Repeat this movement 10 times.

Punches: Sit up tall. Bring your arms to starting position. Punch overhead alternating your arms, then punch out in front of your body alternating your arms.
Complete to the song, 'Eye of The Tiger' or 20 punches each direction.

Appendix C

Quantitative and qualitative outcome measurements

1. Retrospective Pretest Posttest Survey

1= Strongly Disagree **2=** Somewhat Disagree **3=** Neutral **4=** Somewhat Agree **5=** Strongly Agree

	Before participating in the group OT class		**After participating in the group OT class**
Peer Group Participation: I engage in activities with others who have similar interests, age, background, or social status.	1 2 3 4 5		1 2 3 4 5
Community Participation: I engage in activities that result in successful interaction at the community level (e.g., neighborhood, digital social network, religious or spiritual group)	1 2 3 4 5		1 2 3 4 5
Physical activity: I complete cardiovascular exercise, strength training, and balance training to improve or maintain health and decrease risk of health episodes	1 2 3 4 5		1 2 3 4 5
Social and emotional health promotion and maintenance: I seek occupations and social engagement to support health and wellness	1 2 3 4 5		1 2 3 4 5
Social and emotional health promotion and maintenance: I make choices to improve my quality of life in participation	1 2 3 4 5		1 2 3 4 5

I am satisfied with the care I received through the group occupational therapy class.		1 2 3 4 5
I enjoy using telehealth (VVC) to receive occupational therapy.		1 2 3 4 5
I enjoy participating in groups for occupational therapy.		1 2 3 4 5
I enjoy meeting new people through telehealth group occupational therapy.		1 2 3 4 5

2. Focus Group Prompts

- Describe your overall experience with the group.
- What were your favorite parts of the groups?
- What were the biggest challenges with the groups?
- What do you wish there was more of?
- What do you wish there was less of?
- How did you feel about the group on-line, opposed to in person?
- Describe your experience meeting new people online.
- If you could change anything about the group, what would you change?
- What type of classes would you like to see in the future?
- What is one thing you learned from the class?
- How would you describe this class to a stranger?
- Were you satisfied with how many times a week the class was offered?
- Do you wish the classes were longer or shorter in duration? Or were they just right?

Appendix D

Weekly Planning Guide

Week	DCE Stage	Weekly Goal	Objectives	Tasks	Date complete
1	**Orientation**	1) Complete site orientation by the end of the week	Meet with site mentor, set meetings with other site personnel to introduce myself and educate them on why I am here/what I will be doing for the 14 weeks Understand the site environment/where to work/dress code/etc.	- Ensure that all paperwork for orientation is complete - Get badge and VA account access - Identify key stakeholders - Set up meetings with key stakeholders - Compile questions and discussion points for meetings with stakeholders	**Jan 10, 2022**
		2) Confirm student/mentor expectations and responsibilities	Finalize student/mentor expectation section of MOU	- Set up meeting with site mentor to discuss expectations - Document supervision plan and update MOU with site mentor	**Jan 5, 2022**
	Screening/Evaluation	1) Prep and begin needs assessment	Finalize planning for Needs Assessment (identify and contact stakeholders) Familiarize self with group therapy class	- Locate VA group class schedule - Set up class observation - Create field notes template	**Jan 6, 2022**

		2) Update literature review	offerings and observation options Finalize project and identify key themes to guide literature search Update existing literature review with current literature	- Create an excel schedule to organize/track data - Write a list of major themes/areas of DCE project - Use UIndy Library to search for articles within the last 5 years	**Jan 7, 2022**
2	**Screening/Evaluation**	1) Observe existing groups and meet with stakeholders 2) Continue to refine the project and update MOU	Immerse self into a variety of group classes offered throughout the VA Finalize observation schedule across various disciplines and platforms Update needs assessment and SWOT Select theory/framework to guide capstone project	- Attend scheduled observations and keep field notes - Prepare questions and talking points - Update literature review - Complete SWOT analysis	**Jan 14, 2022** **Jan 14, 2022**

3	**Screening/Evaluation**	1) Begin participant recruitment 2) Finalize MOU and discuss project progression with faculty and site mentor	Present project to all occupational therapists within HBPC Present project to HBPC interdisciplinary teams Gather list of potential participants Update MOU with literature updated project outcomes Make any changes to improve project based on feedback	- Create a secured and shared excel sheet to collect participant referrals with contact information - Prepare brief presentation for weekly HBPC IDT meeting - Make necessary changes to MOU to align with updated project goals and outcomes - Schedule and attend faculty and site mentor meetings to	**Jan 21, 2022** **Jan 21, 2022**
4	**Implementation-Preparatory tasks**	1) Complete all preparatory tasks related to program implementation	Create documentation template to use for OT virtual groups Confirm billing codes Create all supplemental resources that will be used during class Practice using virtual platform to increase familiarity	- Refer to existing documentation templates to guide create of virtual group OT notes - Research and discuss billing codes with stakeholders - Create presentation to share throughout virtual OT group with consideration to accessibility - Practice creating groups, sharing information,	**Jan 27, 2022**

		2) Complete particpant recruitment	Call all referred veterans to follow up and give more information about the course Track all participants and their availability in secure excel sheet	adding participants, troubleshooting, etc. - Refer to recruitment list for all veterans names - Confirm their phone number with their patient chart - Call/leave a message describing the group class and how to get involved - Update excel sheet with information gained during calls	**Jan 28, 2022**
5	**Implementation**	Run HBPC Group OT Pilot Program	Adjust group sessions as necessary Document group OT class Take fieldnotes and track participant attendance	- Create plan for upcoming class - Call veterans to confirm attendance - Assist with technology issues as needed - Document sessions and keep fieldnotes	**Feb 4, 2022**
6	**Implementation**	Run HBPC Group OT Pilot Program	Adjust group sessions as necessary Document group OT class Take fieldnotes and track participant attendance	- Create plan for upcoming class - Call veterans to confirm attendance - Assist with technology issues as needed - Document sessions and keep fieldnotes	**Feb 11, 2022**
7		Run HBPC Group OT Pilot Program	***Midterm evaluation*** Adjust group sessions as necessary	- Create plan for upcoming class	**Feb 18, 2022**

	Implementation		Document group OT class Take fieldnotes and track participant attendance Create outcome tool	- Call veterans to confirm attendance - Assist with technology issues as needed - Document sessions and keep fieldnotes - Research appropriate outcome tools for data collection - Develop outcome tool	
8	**Implementation**	Run HBPC Group OT Pilot Program	Adjust group sessions as necessary Document group OT class Take fieldnotes and track participant attendance Finalize outcome tool and plan for data collection	- Create plan for upcoming class - Call veterans to confirm attendance - Assist with technology issues as needed - Document sessions and keep fieldnotes - Finalize outcome tool and method for administration - Confirm focus group date and finalize prompts for discussion - Confirm VA staff to lead focus group to reduce potential for bias - Confirm VA staff to administer survey to reduce potential for bias	**Feb 25, 2022**
9	**Implementation/ Discontinuation**	Gather data using outcome measures	Run focus group	- Obtain consent for focus group audio recording	**March 4, 2022**

		- Focus Group - Retrospective pretest/posttest survey	Collect pretest/posttest surveys	- Finalize focus group prompts - Select transcription software - Email participants link to focus group - Run focus group and thank participants for participation in class and focus group	
10	**Discontinuation**	Begin data analysis	Review and edit transcripts for accuracy Begin coding qualitative data from focus groups Analyze quantitative data from pretest-posttest surveys	- Type transcripts from focus group - Familiarize self with focus group transcripts - Begin coding - Average scores from pretest-posttest survey - Analyze changes in pretest and post test scores - Average satisfaction ratings	**March 11, 2022**
11	**Discontinuation**	Continue data analysis	Continue coding qualitative data Develop Group OT Binder Dissemination plan due	- Set up and confirm dates for dissemination to site - Continue thematic analysis of qualitative data - Organize resources into binder - Create helpful guides for group OT implementation	**March 18, 2022**

12	**Discontinuation**	Finalize data analysis	Complete all tasks related to data collection/analysis Synthesize findings and plan for how to translate findings into practice	- Continue thematic analysis of qualitative data - Finalize themes - Select supporting quotes to emphasize in write up - Create visual representation of data through Mind Map	**March 25, 2022**
13	**Discontinuation/Dissemination**	Develop dissemination resources and presentation	Create resources to leave for HBPC team Create and finalize presentation	- Organize helpful resources to leave with site - Develop Binder and eBinder to leave resources at site	**April 1, 2022**
14	**Dissemination**	Disseminate project to VA interdisciplinary team Final Site Mentor Evaluation Complete all "employee exit" tasks at the VA	Confirm time/place/attendees for dissemination of project Finalize presentation and resources (printed presentation, hand outs, etc.) Complete final site mentor evaluation from CORE Complete all exit tasks at VA	- Finalize presentation to site - Site mentor review and give feedback for site presentation - Final Evaluation on CORE - Complete all exit tasks for the VA.	**April 7, 2022**