# Promoting Whole Health and Well-Being at Home: Veteran and Provider Perspectives on the Impact of Tele-Whole Health Services

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## Abstract

**Background:** The Veterans Health Administration (VA) is undergoing a transformation in how healthcare is organized and provided. This transformation to a Whole Health System of Care encompasses the integration of complementary and integrative health services, education, and Whole Health coaching to develop Veterans' self-care skills. During the COVID-19 pandemic, these services were provided via telehealth (tele-WH).

**Objective:** We sought to understand Veteran and provider perspectives on how tele-WH impacts Veteran engagement in Whole Health-aligned services and the impact on their well-being.

**Methods:** Semi-structured interviews were conducted with 51 providers who delivered tele-WH at 10 VA Medical Centers (VAMCs) and 19 Veterans receiving tele-WH at 6 VAMCs. Participants were asked about their experiences with tele-WH, what they perceived to be the impact of tele-WH on Veterans, and their preferences moving forward. Interviews were transcribed, and a content analysis was performed using a rapid approach.

**Results:** We identified 3 major themes that describe the perceived impact of tele-WH on Veterans. These include: (1) increased use of Whole Health-aligned services; (2) deeper engagement with Whole-Health aligned services; and (3) improvements in social, psychological, and physical well-being.

**Conclusion:** Tele-WH is perceived to be a strong complement to in-person services and is a promising mechanism for improving engagement with Whole Health-aligned services and promoting Veteran well-being. Future research is needed to measure outcomes identified in this study and to support more equitable access to telehealth for all.

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#### **Keywords**

telehealth, whole health, well-being, complementary and integrative health, veterans

## Introduction

The Veterans Health Administration (VA) has been leading the charge of integrating a focus on well-being into health care through its implementation of a Whole Health System of Care. A Whole Health (WH) System aims to shift care from a disease-focused approach to one that promotes well-being and disease prevention across multiple dimensions of a Veteran's life.<sup>1</sup> The VA has implemented a range of approaches and evidence-based services to support well-being, including strategies to identify Veteran goals<sup>2</sup> and provide complementary and integrative health (CIH) services (e.g., acupuncture, yoga),<sup>3,4</sup> and Whole Health coaching.<sup>5,6</sup>

Since launching implementation of a WH system, the VA has seen a tremendous increase in Veteran use of Whole Healthaligned services resulting in decreased opioid use in Veterans with chronic pain, a greater sense of well-being, reduction in chronic stress and an improved perception of patient-centered care among Veterans receiving WH.<sup>7</sup> A growing body of research demonstrates the positive impact on Veterans' perceptions of their own well-being when traditional clinical care is combined with components of Whole Health.<sup>7-10</sup>

As a result of existing investments in telehealth and WH system infrastructure prior to the COVID-19 pandemic,<sup>11</sup> the VA was quickly able to increase virtual delivery of Whole Health-aligned services<sup>12</sup> during a time when many health services were suspended or greatly reduced.<sup>13</sup> While the value of synchronous telehealth for monitoring disease and increasing access to health care has been well established,<sup>14</sup> its role in promoting well-being as part of a Whole Health System of Care has not previously been explored. We sought to understand Veteran and provider perspectives on how synchronous telehealth formats to deliver Whole Health-aligned services (hereafter referred to as tele-WH) impacted Veterans with the goal of generating ideas around outcomes to measure in future studies.

## **Methods**

#### Study Design

Semi-structured qualitative interviews were conducted with Veterans and providers from twelve geographically diverse VA medical centers to examine the perceived impact of tele-WH on Veterans. A total of 54 VAMCs were in the initial sampling pool because they had been working towards developing a Whole Health System of Care as either a Whole Health demonstration site<sup>6</sup> (n = 18) or a WH Learning Collaborative site (n = 36). The VA's national Whole Health utilization dashboard was then reviewed to identify sites with high and low rates of WH services offered via telehealth.

After reviewing utilization data for all 54 sites for the period of March 2020-February 2021, we eliminated sites whose tele-WH utilization was driven by just 1 or 2 services (e.g., predominately yoga). We sought to identify sites that offered WHaligned services in multiple categories including movement (e.g., yoga, tai chi), education and coaching, and mindfulness/ meditation. Then, to identify high and low sites, we first determined that, across all of VA, the proportion of Whole Health services delivered via telehealth during the COVID-19 pandemic was approximately 30%. We then went on to categorize the sites in our sample; the high sites had an average proportion of tele-WH encounters of approximately 50% (range 46-54%) and the low sites approximately 20% (range 19-21%).

The VA Bedford Institutional Review Board determined that this work was consistent with program evaluation and quality improvement efforts for VA operations, exempting this evaluation from further oversight.

# Participants

WH providers were recruited from ten sites, 6 with high and 4 with low tele-WH utilization. This variation allowed us to capture a range of experiences delivering tele-WH. Providers were included if they delivered WH activities including WH Coaching, movement (e.g., yoga, Tai Chi), mindfulness/meditation, providerdelivered (e.g., acupuncture, chiropractic care), and other Whole Health-aligned services (such as integrative medicine clinics).

Veterans were recruited from 6 sites with high levels of tele-WH utilization; 4 sites were ones included in the provider interviews and 2 sites were selected to ensure geographic diversity in the sample. Whole Health providers and Veterans were recruited from geographically diverse VA Medical Centers. Sites were based in the Midwest, Southeast, South Central, Southwest, Southeast, West, and Northeast United States. Veterans were identified based on their participation in at least 1 Whole Health-aligned service, either in-person or remotely, prior to the COVID-19 pandemic, as documented in their electronic medical record and by self-report on a previously fielded survey of Veterans at 18 VA medical centers implementing WH.<sup>7</sup> To increase diversity within our Veteran sample, we considered rurality, race, and gender in recruitment.

## Data Collection

Two teams, 1 for providers and 1 for Veterans, of 5 study members experienced in qualitative methods conducted semistructured interviews via video conference and/or phone from Spring to Summer 2021. Interviews with both types of participants asked about their experiences with tele-WH and perceptions of how tele-WH impacted Veterans. Additionally, providers were asked about their experiences delivering services in a telehealth format, benefits and challenges of tele-WH, and satisfaction with tele-WH. Veterans were asked to describe their experiences of Whole Health and tele-WH use, preferences for engaging in Whole Health-aligned services, and satisfaction with a Whole Health approach overall. This detailed examination of a small number of individuals was aimed at gaining deeper insights into lived experiences to help generate theories about the impacts of tele-WH on Veterans.<sup>15,16</sup> Interviews lasted up to 1 hour and were audio-recorded and transcribed. Participants provided verbal consent prior to participating.

### Data Analysis

A directed content analysis<sup>17</sup> was conducted using a rapid approach to coding<sup>18</sup> to understand participant experiences with tele-WH and impact of tele-WH on well-being. All interview transcripts were analyzed by their respective team of qualitative researchers. Individual interviews were summarized using a structured template, with teams meeting to develop consensus about how to capture content into a priori domains based on the semi-structured interview guides. Additional, emergent domains were developed from the interviews and incorporated into the template that guided analysis.

For each group, 2 initial transcripts were first summarized by 2 researchers and then closely reviewed by the other 3 team members to develop consensus and consistency in the application of the template. Ten additional interviews, selected randomly, were summarized in rotating pairs or triads. The remaining transcripts were summarized individually, with the full team meeting regularly to resolve uncertainties or refine content domains. Summary templates were condensed into a single matrix to allow synthesis of findings within and across categories, using constant comparison to understand how tele-WH impacted Veterans. The 2 study teams met several times to share findings and the lead author reviewed the summary templates and matrices from both studies to identify common and unique themes. Notably, findings for this paper draw on perceptions and experiences of people who successfully participated in tele-WH. This was done intentionally to understand potential benefits of engaging in tele-WH to inform future work measuring tele-WH outcomes.

# Results

Across all sites included in the study, there was a substantial increase in WH services delivered via telehealth between February 2020 (pre-pandemic) and the 2 years following pandemic onset. In February 2020, a total number of 4,545 unique Veterans took part in 13,741 tele-WH service encounters. In February 2021, this number nearly quadrupled, with 24,289 unique Veterans taking part in approximately 54,959 tele-WH encounters. This trend continued the following year, with 37,037 unique Veterans engaged in 81,341 tele-WH service encounters.

#### Sample

A total of 51 tele-WH providers and 19 Veterans that were involved in tele-WH services participated in interviews. Providers delivered and Veterans participated in a range of tele-WH services in both individual and group formats, including movement (e.g., yoga, Tai Chi, dance), mindfulness/meditation, Whole Health coaching, educational and skills-based services (e.g., dietician/nutrition, smoking cessation, weight loss, pain management), and provider-delivered services (e.g., acupuncture, chiropractic care). The majority of providers across all sites were in their Whole Health role for an average of 2-4 years, with the overall average being 3 years. Providers offering complementary and integrative health services, such as acupuncture/acupressure, meditation, and biofeedback, were more likely to report longer time in their role (between 5 and 10 years) as these services were available at many VA medical centers before the roll out of Whole Health. Newer positions associated with the Whole Health roll out, such as Whole Health Coaches and Peer Partners, tended to have the least amount of time in their roles, with some reporting starting during the pandemic.

Table 1 provides an overview of Veterans' demographic characteristics. Veteran participants were primarily male (58%), White (84%), urban (89%), and ranged in age from 42 to 86 years old (average age 62). Equivalent demographic information on WH providers was not recorded.

Table 1 also describes participant involvement in discrete tele-WH services. Tele-WH counts in this table represent a range of synchronous Whole Health-aligned offerings that Veterans have participated in or providers have experience providing directly. Other Whole Health Education and Skill-Building services were the most commonly provided (45%) and participated in (43%) among participants. These include a variety of classes and workshops that provide education on mind-body connections and skills for self-managing specific conditions. A little more than a third (35%) of provider participants also offered tele-WH Coaching and 32% of Veteran participants reported taking part in this offering. Nearly a third of Veteran participants (32%) also participated in Other WH Movement classes, the most common of which was the VA's MOVE! Program. Nearly a quarter of providers (23.5%) offered mindfulness-based interventions, such as intuitive eating or stress reduction. The full range of services offered and taken part in among the study sample can be found in Table 1.

# Perceived Impacts of Tele-WH Services on Veterans

From participant narratives, we identified 3 major themes that describe ways in which tele-WH impacted Veterans. These include perceptions of (1) increased use of Whole Healthaligned services; (2) deeper engagement with Whole-Health

	Veterans $(n = 19)$		
Veteran characteristics	Frequency	Percentage	
Demographics			
Gender			
Male	11	57.9%	
Female	8	42.1%	
Age (mean age = 61.6)			
25-44	I	5.3%	
45-64	9	47.4%	
65-84	8	42.%	
85 and older	I	5.3%	
Race			
White	16	84.2%	
Black	2	10.5%	
Hawaiian Or Pacific Islander	I	5.3%	
Urbanicity			
Urban	17	89.5%	

Table 1. Veteran Demographics and Veteran and Provider Tele-WH Experience.

Whole health and CIH Experience via Tele-WH

	Veterans (n = 19)		Providers $(n = 51)$	
	Frequency	Percentage	Frequency	Percentage
Core whole health – Education	2	10.5%	9	17.6%
Core whole health – Coaching	6	31.6%	18	35.3%
Other whole health – Education and skill-building	8	42.1%	23	45.1%
Other whole health – Movement	6	31.6%	7	13.7%
Other whole health – Consultation	-	-	8	15.7%
Yoga	4	21.1%	8	15.7%
Tai chi/Qi Gong	4	21.1%	5	9.8%
Meditation	2	10.5%	7	13.7%
Mindfulness-based intervention	3	15.8%	12	23.5%
Acupressure	2	10.5%	6	11.8%
Hypnosis	I	5.3%	I	2%
Biofeedback	-		I	2%
Guided Imagery	-		2	3.9%

aligned services; and (3) improvements in social, psychological, and physical well-being.

## Increased Use of Whole Health-Aligned Services

All Veterans we interviewed had taken part in at least 1 inperson WH aligned service prior to the onset of the pandemic. Providers in our sample said that tele-WH allowed many Veterans to continue taking part in Whole Health-aligned services during a time when access to many health and wellbeing services were suspended or greatly reduced. The Veterans we interviewed attested to this. The possibility of accessing WH services via virtual formats also provided opportunities for some groups of Veterans to try new services for the first time due to perceived greater convenience, flexibility, and comfort compared to in-person services.

Increased Flexibility/Convenience. Many providers noted that a main benefit of tele-WH for promoting well-being was the increased reach and inclusion of Veterans living in rural areas and improved accessibility for Veterans with disabilities or complex care concerns. Offering services via telehealth created a more convenient way for people to participate as it eliminated the need for long and challenging commutes to a VA facility. They also believed that WH services offered via telehealth offered more flexible options for participation, particularly among younger, non-retired Veterans who could participate during their workday or after traditional VA business hours. Veterans similarly thought tele-WH offered flexibility and convenience that facilitated regular participation and aligned with individual preferences.

Increased Comfort. Services offered via telehealth were also noted to offer a greater sense of comfort among a few subgroups of Veterans. In particular, Veterans with Post-Traumatic Stress Disorder (PTSD) or other mental health concerns and woman-identifying Veterans reported or were perceived to feel more comfortable participating in WH virtually compared to in-person. For example, Veterans with PTSD are often hyper-vigilant in public places and may have a hard attending any type of WH services in-person at VAMCs or outpatient clinics. Being able to take part in an activity from their home, without having to navigate the seeming unpredictability of public spaces, allowed them to try WH-aligned services they might not have tried if they had to participate in-person. For women-identifying Veterans in our sample, several shared that going into VA hospitals to participate in-person was sometimes uncomfortable; they are a minority Veteran population and sometimes face harassment or discrimination. Tele-WH was perceived to help them participate in meaningful services and avoid mistreatment from others. See Table 2 for quotes related to tele-WH impact on use.

Deeper Engagement in Whole Health-Aligned Services. Interviewees reported that tele-WH deepened engagement in Whole Health-aligned services for some Veterans. By deeper engagement we are referring to greater quality of involvement in services, i.e. participating more meaningfully and fully in services, as well as involvement in activities that require more self-motivation, such as self-care routines done day-to-day outside of regularly scheduled classes and appointments.

Increased Sense of Psychological Safety. Many providers noticed that Veterans were more comfortable taking part in Whole Health-aligned services from home, which led to deeper connections with Veterans and higher quality experiences with Whole Health-aligned services. Whole Health coaches in particular noted that, in general, interacting with Veterans in their homes led to more successful interactions because tele-WH promoted psychological safety by avoiding the anxiety associated with coming into the medical center. This was especially true for the first 10-15 minutes of the session. When connecting at home, Veterans were already relaxed and logged in ready to engage. When services are offered in person, people were more likely to enter a session stressed from the commute to the VA and/or navigating around the medical center to get to the office. In addition, some yoga and meditation instructors mentioned that Veterans coping with PTSD or who had a history of military sexual trauma felt less vulnerable closing their eyes over meditative periods using tele-WH than they did in person.

Tailored to Home Environment. Participating in some WHaligned services in home environments required Veterans to create space in their homes where they can engage. For movement classes like yoga or tai chi, this meant creating a space free of obstacles and finding equipment or tools used in classes. For meditation or mindfulness classes, WH coaching, and interactive educational classes this meant finding quiet space in the home where they could engage without being disturbed. Whereas in-person classes provided the resources required for engagement, some Veterans and providers noted that they only practiced self-care and skill-building routines when they went to VA. The shift to services being offered via telehealth prompted creation of space and acquisition of resources that allowed them to participate at home. For some, this led to the development of a self-care routine and deeper level of engagement in Whole Health-aligned services outside of clinical appointments or scheduled classes. Examples discussed by providers included empowering Veterans to use techniques to better manage pain or anxiety, trying new recipes taught during healthy cooking classes, and

Table 2	. Tele-WH	Impact on	Use.
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Sub-Themes	Illustrative Quotes
<b>Increased flexibility and convenience</b> made it easier to participate especially for those who work, or who have difficulty getting to a VA facility for example those who are older, and/or have disabilities or complex conditions.	"We have the ability to reach out to so many people this way that we can't other ways. Especially where people tend to be a lot older, not driving, not out in the roads – we can still reach them. We can still give them our services." (Provider 3-A, Licensed Practical Nurse and WH Coach) "It's made it more convenient to participate because I don't have to travel. It's made it easier to participate I think you can do it all and matter of fact, I'd encourage doing it." (Veteran 4-5, 64-year-old White male in urban setting) "I'm getting a lot of people who are taking a break during their workday. And then catching all the people that do work full-time." (Provider 2-C,
<b>Increased comfort</b> made it easier to participate in tele-WH for some Veterans, for example those with PTSD and other mental health concerns, and women-identifying Veterans	Recreational therapist, Yoga, Tai Chi, and Meditation Instructor) "Especially as a woman, it's nice not to have to go be treated by the older Veterans the old school way that I dealt with for 25 years. So, it's nice to just be able to be in my own home, my own space." (Veteran 3-21, 50- year-old White female in urban setting)

incorporating yoga into their daily lives and spaces. Veterans similarly described the value of learning to more actively engage in self-care strategies that they could use on their own time.

Provider-delivered therapies such as massage and acupuncture that were delivered virtually were highlighted by both providers and Veterans as an important mechanism to increase self-care. To facilitate engagement in self-care, many providers used their appointment times to teach Veterans to implement techniques like self-massage, acupressure, exercise, or stretching to increase physical and mental well-being at home. This empowered Veterans to think about what they could do for their own self-care instead of only passively receiving benefits through direct needling, massage therapy or chiropractic care. Thus, these tele-WH services equipped Veterans with skills to regularly engage in their own self-care and support their physical and mental well-being. Providers compared these observations to pre-pandemic engagement in Whole Health-aligned services, noting Veterans typically opted for CIH treatments that were provider driven and did not require a lot of active participation (e.g., massage, acupuncture). Veterans similarly revealed that provider-delivered therapies delivered virtually helped them adopt self-care strategies tailored to their needs. Implementing learned stretches, breathing, or exercises throughout the day has aided in Veterans practicing self-care in their daily life. See Table 3 for quotes related to tele-WH impact on engagement.

# Promotion of Social, Psychological, and Physical Aspects of Well-Being

Several Veterans and providers said that participation in and meaningful engagement with Whole Health-aligned services through tele-WH promoted many aspects of health, including social, psychological, and physical well-being by supporting both continued interactions with peers and self-care routines. This was particularly important during a time when concerns with isolation and loneliness due to pandemic-related recommendations for social distancing were high.

*Continued Interaction with Peers.* For many Veterans, tele-WH provided a platform to continue to engage with their peers regularly which was beneficial for maintaining their sense of well-being. Many providers and Veterans reported that social connections were particularly enhanced in group-based tele-WH offerings (i.e., group movement-based classes, educational and skills-based classes). Discussion-based group offerings were perceived to provide the greatest opportunities to connect and share personal stories over tele-WH. For example, one Veteran shared that the peer support provided by a WH-aligned smoking cessation group served as a main motivation for quitting smoking. When the group transitioned to tele-WH, it allowed for this Veteran to maintain those peer connections throughout the pandemic and receive the continued social support they needed. Another Veteran shared

that virtual Whole Health coaching provided an uplifting social outlet during the pandemic that served as a motivator for remaining active. One provider articulated that tele-WH was particularly important for Veterans who relied on the VA as their main source of social activity and interactions with peers. Although not perceived to be the same quality of interactions as in-person activities for many, being able to connect with others via telehealth helped reduce feelings of isolation and loneliness for some Veterans.

Increased Access to Services and Use of Self-Care Routines. Veterans cannot benefit mentally or physically from WH services if they do not participate in them. The increased and more regular use of WH-aligned services noted above was perceived to contribute to improved health and wellbeing for the Veterans. Similarly, the self-care routines discussed above as contributing to deeper engagement in WH activities were also instrumental for improving aspects of their well-being. For example, one Veteran shared that implementing the self-care techniques they learned through tele-WH helped them avoid a panic attack while going about their daily life. One provider similarly shared that self-care strategies like acupressure taught through tele-WH helped Veterans with chronic pain self-manage their concerns so that they were not struggling in their day-to-day life. See Table 4 for quotes related to tele-WH impact on social, psychological, and physical well-being.

# Limitations of Tele-WH Services

>Although there were many positive aspects of tele-WH, participants also noted that "one size does not fit all." Individual preferences play a large role in how people will choose to engage in WH services when choice (inperson or virtual) is an option. Several limitations of telehealth were noted that contributed to these preferences including technical and logistical challenges, perception of reduced effectiveness, and less satisfying social interactions.

# Technical and Logistical Challenges

Some participants perceived certain WH services to not be a good fit for virtual implementation due to the technical and logistical challenges caused by the modality. For example, some providers and Veterans felt that WH classes that are meant to foster supportive, reflective, and interactive dialogue among participants were more difficult to implement as intended. Challenges with broadband and connectivity, interruptions in the home environment, and people talking simultaneously created fragmented and sometimes frustrating interactions. Providers described needing to make adaptations to accommodate these challenges, which changed the feel and connections associated with the class.

Table 3. Tele-WH Impact on Engagement	
Sub-themes	Illustrative quotes
Increased sense of psychological safety led to higher quality experiences (deeper engagement)	"Trauma-informed yoga is where I like to tap in because most of us deal with trauma, be it childhood trauma or, like, whatever it is, and I have found [Veterans] not closing [their] eyes because of that hypervigilance. So, in person, having a Veteran close their eyes would be chaotic. Like, it would be – but in their own home, makes yoga nidra be a lot more acceptable and easier for people because they're in their own space. (Provider 3-F, Yoga and Tai Chi Instructor) "For a lot of people, their home is their safe space. So, they're more apt to really show you who they truly are in their home as opposed to going into the clinic because it's the white [coat] syndrome, as a lot of people call it. And, so, by them being in their home, you know, you see them smile, you see them laugh. Like, you don't see that in the clinic, you know, 'cause a lot of people will just have that 'white coat syndrome' and they don't like being in clinics." (Provider 4-A, WH Coach)
Tailored instruction adapted to unique home environments led to more awareness/daily routine use of WH (deeper engagement)	Tarlored instruction adapted to unique home environments led to more "[Tele-WH] ges the Veteran practicing yoar hom: which was my utimate goal. Right – like, the end thing awareness/daily routine use of WH (deeper engagement) 2.C. Recreational therapist, Yoag. Tai Chi, and Meditation Instructor) 2.C. Recreational therapist, Yoag. Tai Chi, and Meditation Instructor) 1.treated the owneness shall inteleded to focus on those things and practice them. Whether it's yoga or Tai Chi or even socialization especially after this past year of COVID the isolation that I had to go through but it's more for those of us that have PTSD. So, havin, the owneness of being mindful and – and scheduling something for ourselves go do this or do that or all sometody instead of just sitting in isolation (Veteran 4-11, 61-tyeer) et all helping in a way that it's more empowering at least in my experience with getting people started in active care

Sub-Themes:	Illustrative Quotes:
<b>Continued interaction with peers</b> during pandemic led to positive peer support and motivation to maintain healthy habits and decreased loneliness and isolation.	"Some of our older Veterans can't get out much due to physical limitations. Like they were coming to the VA for their activity of the day. It was the only time they were getting out and so the pandemic really affected [them] mentally. Being able to see them on camera has helped with that. I've had Veterans that were super depressed completely turn around having been able to see my face now again." (Provider 7-F, WH Coach)
	"I stop(ed) smoking by listening to these other people who struggle So, it's very beneficial. I think it's a good group. You sit there, you talk." (Veteran I-13, 80-year-old White male in urban setting)
	"I mean these programs are helping me stay mobile enough and focused enough on getting out there and doing things [the virtual coaching] makes you feel good. It's not like you're just a number. It's uplifting especially at a time like this where you can't really go out and see your friends and stuff." (Veteran 2-10, 60-year-old White female in urban setting)
<b>Increased access to services and use of self-care routines</b> led to perceptions of better mental and physical health	"I had an experience here a few weeks ago in a small supermarket where I felt kind of wobbly, I didn't know if I was a little bit nauseous, I had a little bit of sweating, things like that, but I was able to do some deep breathing exercises and I kept going. I didn't panic and have to run out of the store or anything like that, so I attribute the things that I've learned in helping me to sort of stay functioning." (Veteran 1-8, 86-year-old Black male in urban setting)
	"I have one patient tell me [self-acupressure] saved his life. It sounded like he was going to commit suicide. He said, "I just want you to know, you actually saved my life. I'm able to manage my pain. I'm not a zero, but it's to the point where it's not excruciating, you know." So,I've gotten a few of those, not exactly "saved my life", but it's really helped a lot." (Provider 3- D, Acupuncture Physician)

Table 4. Impact on Social, Psychological, and Physical Well-being.

# **Reduced Effectiveness**

In the virtual setting, providers adapted traditionally providerdelivered services (e.g., acupuncture, massage, chiropractic care) for tele-WH by teaching acupressure, stretches, foam rolling, or incorporating nutrition counseling and education. Veterans appreciated the option and opportunity to learn techniques to promote their well-being at home and recognized the new ways they were equipped to independently manage health concerns. However, some Veterans perceived these adaptations to be less effective for promoting their physical and mental well-being and preferred going into the clinic to receive direct needling, chiropractic care, or massage. This was seen as contributing to the decline in the use of tele-WH for these provider-delivered services over the course of the pandemic.

#### Less Satisfying Social Interactions

We also learned that the social aspect of Whole Health may be a deciding factor for how Veterans may choose to use Whole Health-aligned services, particularly group offerings, moving forward. While some people felt more comfortable attending group Whole Health-aligned services virtually, others found in-person socialization an important factor in improving their well-being – a need that is not adequately fulfilled through tele-WH for some. For these individuals, the option to engage via telehealth was an important, but temporary option until in-person offerings were available again. See Table 5 for quotes related to tele-WH impact on long-term use.

# Discussion

We found that, among the Veterans and providers we spoke with, tele-WH was perceived to increase Veteran use of Whole Health-aligned services, deepen engagement with Whole Health, and present many benefits for Veterans' sense of social, psychological, and physical well-being. We also found that Veteran preferences for the modality varied, which may influence how they choose to participate in Whole Health-aligned services in the future.

Table 5.	Tele-WH	Impact on	Long-Term	Use
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Sub-Themes	Illustrative Quotes
<b>Technical and logistical challenges</b> , particularly in tele-WH group classes, made it less attractive for some for long-term use	"There's a few that they've gotten frustrated because of the issues where, you know, things will freeze up and it's so funny because they're always like 'I can't hear you' the only thing I can do is mute you and unmute you I always apologize that they're having technical issues and I always give them help and hints but there's some of them that just get so frustrated that they don't want to do it unless it's face-to-face." (Provider I 0-C, Yoga Instructor)
<b>Perception of reduced effectiveness</b> for provider-delivered tele- WH services made it less attractive for some for long-term use	"I tried acupressure [virtually], and that really doesn't work for me. [Because] of my pain – the acupressure is not as beneficial as a body massage [in-person] would be." (Veteran 4-2., 59-year-old White female in urban setting)
<b>Less satisfying social interactions</b> made tele-WH less attractive for some for long-term use	and have the human contact, you know. We all need to really make sure that our friends exist." (Veteran 2-10, 62-year-old White female in urban setting)
	"I think some are more apt to [participate in virtual services] and others don't want to and on the same token though, those who didn't want to come to face-to-face groups are more than willing to come to virtual [services] moving forward I just think when we offer in-person groups, we're going to see that some people are not going to come for those in- person groups but the ones who really need that interaction will." (Provider 2-E, Clinical Dietician)

The VA's ongoing implementation of a Whole Health System of Care addresses calls for improving a broken healthcare system in the US<sup>19-24</sup> by shifting the culture of care to promote overall well-being and incorporate greater personcentered care.<sup>6</sup> Part of the conceptual model for personcentered care is to recognize the range of preferences for care, including mode of service delivery.<sup>25</sup> As we found, people have varying reasons for why they may prefer virtual or in-person means of receiving care or engaging in wellbeing practices. Some considerations that were found to influence preferences for the modality of care included: distance or time commitment to participate in a service offering; work schedules and convenience; level of psychological safety; comfort; physical limitations; desire for inperson interactions; and/or the type of Whole Health-aligned service the Veteran was attending, among others. The increase in individual choice for care that is afforded by tele-WH recognizes that a shift to promoting well-being is not a one size fits all approach. By acknowledging varying Veteran preferences and tailoring options for how services are delivered, the WH system will better accommodate Veteran needs and meet them where they are ready.

Our findings suggest that tele-WH may be especially beneficial for subpopulations that are less comfortable going in to VAMCs, such as women-identifying Veterans,<sup>24,25</sup> Veterans with PTSD,<sup>26</sup> or those who have experienced other trauma.<sup>27–30</sup> The perceived flexibility, convenience and comfort associated with tele-WH may facilitate these and other Veterans' initial participation in Whole Health offerings. This would help to address a barrier noted by Marchand et al.,<sup>31</sup>

specifically that many Veterans referred to WH activities fail to engage in them. Providing a range of options, including virtual and in-person, may help provide equitable opportunities for more Veterans to become actively involved in their care and support person-centered care. Future research could compare virtual vs in-person Whole Health service participation and retention rates across all Veterans and among subpopulations and the quality and effectiveness of such services.

Many Veterans who used tele-WH also said they deepened their use of WH in their day-to-day lives. Importantly, providers shared that education around self-care techniques were also taught while services were in-person, but Veterans were less apt to actively implement them compared to when services were only delivered via tele-WH. Our findings suggest that this may be due to specific prompts and recommendations for virtual class participants to create their own space at home to properly engage in the virtual activity. Future studies to explore whether in-person or virtual WH services are more likely to promote self-care routines are needed. This is a worthwhile question to answer given that a main goal of Whole Health is to empower Veterans to take charge of their own health and to help Veterans go about their day knowing that they have tools to manage their concerns if they arise.

Our findings also suggest that tele-WH can promote social, psychological, and physical well-being. Previous literature evaluating acupressure, delivered in-person or through asynchronous telehealth modalities, has found it to be an effective strategy for managing chronic pain, promoting weight management, and reducing depressive symptoms.<sup>32,33</sup> Similar findings are true for virtual yoga.<sup>34</sup> WH-aligned care

has also been shown to be associated with improvements in overall well-being in comprehensive evaluations of Whole Health.<sup>9,35</sup> Our findings support the idea of virtual delivery as a viable way to bring this care into people's homes. Future research may utilize the well-being measure, a validated clinical measure developed by VA researchers currently being pilot tested across the VA, to assess the impact of tele-WH on Veteran well-being.<sup>36,37</sup>

The participants in our study reported that tele-WH allowed Veterans to continue developing social connections with their peers - especially while public health measures to prevent the spread of COVID-19 were in place. Socializing has repeatedly been linked with directly improving physical and psychological well-being and with mediating the effects of stress on overall health.<sup>38</sup> Social support is also important for maintaining resiliency - particularly for individuals living with chronic diseases and for adopting healthy behaviors.<sup>39</sup> With the prevalence of social isolation among Veterans,<sup>40,41</sup> increasing tele-WH opportunities post-pandemic may be crucial for Veterans who only have virtual means of socializing and connecting with peers. Doing so may help advance equity in opportunities to reduce loneliness, facilitate meaningful connection, and encourage Veterans to regularly engage in activities designed to promote well-being. Future research could help illuminate any impacts of tele-WH use on isolation and loneliness.

Our study has limitations that should be considered. Our sample of patients was not representative of the general VA patient population as it had a higher proportion of womenidentifying Veterans and lower proportion of rural Veterans. The overrepresentation of women, however, allowed us to hear perspectives of a subgroup of Veterans that particularly appreciated the tele-WH option. The small number of rural Veterans in our sample is notable since special efforts were made to recruit them and providers believed that tele-WH options helped rural Veterans access WH activities. The limited number of rural Veterans in our sample could have happened by chance. Alternatively, it may be a reflection of the significant barriers (e.g., limited broadband access<sup>42</sup>) that rural patients are known to face in accessing telehealth in general. This highlights the fact that, because of our study objectives, we purposefully spoke with Veterans who had successfully participated in tele-WH. In light of the many benefits attributed to tele-WH by our study participants, we need to acknowledge that access to telehealth is not evenly geographically<sup>42</sup> distributed either nor among subpopulations<sup>43,44</sup> (e.g., older adults). Finally, Veteran recruitment may have been from a pool of Veterans who are already more actively involved in their care. As all our Veteran participants had been exposed to at least 1 in-person Whole Health service, an opportunity for a future study would be to explore the experiences of Veterans who have only been exposed to tele-WH and no in-person WH services. Future work can also be done to understand whether the content of tele-WH is directly associated with improvements in well-being or whether the same outcome can

be achieved through participation in another meaningful activity that fosters social connection.

Despite these limitations, our evaluation has several strengths. This study provides a novel contribution to the field of health services research as it qualitatively explores the impact of synchronous video clinical telehealth for CIH therapies, well-being classes, and health coaching. Furthermore, this study is contextualized within the largest integrated health care system in the U.S. undergoing a transformation to a Whole Health System of Care. The perspectives we highlight represent geographic and contextual variation across the U.S., which is particularly important for telehealth evaluation studies as different regions face unique barriers to care.<sup>45</sup> This study is timely as healthcare institutions are actively considering the future of their healthcare delivery. We demonstrate how telehealth can be used for more than monitoring a person's condition and that it can also be used to support people to incorporate and maintain healthy lifestyle changes that promote their overall well-being.

# Conclusion

Our evaluation supports tele-WH as a viable option for care for some and found ways in which it fosters engagement in Whole Health-aligned services to promote Veteran well-being. This work serves as a starting point for evaluating the efficacy and impact of virtual well-being services on wellness and health outcomes. As virtual care models become increasingly integrated with routine care, there is opportunity to expand upon what was learned in this qualitative evaluation. Future research can build upon the foundational insights gained from this study by examining how retention rates and well-being outcomes differ among people who participate in services to support well-being either in-person, or through virtual synchronous or asynchronous options. A sustained implementation of tele-WH in addition to in-person services may improve satisfaction of Whole Health-aligned services; improve access and personcentered care; and aid in shifting the culture of health and wellbeing in the VA and the larger US healthcare system to one that empowers and equips people to pursue well-being based on what matters most to them.

#### **Declaration of conflicting interests**

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#### References

- Krejci LP, Carter K, Gaudet T. Whole Health: The Vision and Implementation of Personalized, Proactive, Patient-driven Health Care for Veterans. *Med Care*. 2014;52:S5-S8. doi:10. 1097/mlr.0000000000226
- Bolton RE, Bokhour BG, Hogan TP, Luger TM, Ruben M, Fix GM. Integrating Personalized Care Planning into Primary Care: a Multiple-Case Study of Early Adopting Patient-Centered Medical Homes. J Gen Intern Med. 2020;35(2):428-436. doi:10.1007/s11606-019-05418-4
- Farmer MM, McGowan M, Yuan AH, Whitehead AM, Osawe U, Taylor SL. Complementary and Integrative Health Approaches Offered in the Veterans Health Administration: Results of a National Organizational Survey. *J Altern Complement Med.* 2021;27(S1):S124-s130. doi:10.1089/acm.2020.0395
- Taylor SL, Hoggatt KJ, Kligler B. Complementary and Integrated Health Approaches: What Do Veterans Use and Want. J Gen Intern Med. 2019;34(7):1192-1199. doi:10.1007/s11606-019-04862-6
- Purcell N, Zamora K, Bertenthal D, Abadjian L, Tighe J, Seal KH. How VA Whole Health Coaching Can Impact Veterans' Health and Quality of Life: A Mixed-Methods Pilot Program Evaluation. *Glob Adv Health Med.* 2021;10: 2164956121998283. doi:10.1177/2164956121998283
- Bokhour BG, Haun JN, Hyde J, Charns M, Kligler B. Transforming the Veterans Affairs to a Whole Health System of Care: Time for Action and Research. *Med Care*. 2020;58(4): 295-300. doi:10.1097/mlr.000000000001316
- Bokhour BG, Hyde J, Kligler B, et al. From Patient Outcomes to System Change: Evaluating the Impact of VHA's Implementation of the Whole Health System of Care. Health Services Research. DOI: 10.1111/1475-6773.13938
- Abadi M, Richard B, Shamblen S, et al. Achieving Whole Health: A Preliminary Study of TCMLH, a Group-Based Program Promoting Self-Care and Empowerment Among Veterans. *Health Educ Behav.* 2021:10901981211011043. doi: 10.1177/10901981211011043
- 9. Whole Health System of Care Evaluation: A Progress Report on Outcomes of the WHS Pilot at 18 Flagship Sites. 2021.
- Elwy AR, Taylor SL, Zhao S, et al. Participating in Complementary and Integrative Health Approaches Is Associated With Veterans' Patient-reported Outcomes Over Time. *Med Care*. 2020;58:S125-S132. doi:10.1097/mlr.000000000001357
- VHA Pain Management: PACT Roadmap for Managing Pain. US Department of Veterans Affairs. Accessed April 10, 2022.https:// www.va.gov/PAINMANAGEMENT/Providers/index.asp
- Mullur RS, Kaur Cheema SP, Alano RE, Chang LE. Tele-Integrative Medicine to Support Rehabilitative Care. *Phys Med Rehabil Clin N Am.* 2021;32(2):393-403. doi:10.1016/j.pmr.2020.12.006

- Der-Martirosian C, Wyte-Lake T, Balut M, et al. Implementation of Telehealth Services at the US Department of Veterans Affairs During the COVID-19 Pandemic: Mixed Methods Study. *JMIR Formative Research*. 2021;5(9):e29429. doi:10.2196/29429
- Henry BW, Block DE, Ciesla JR, McGowan BA, Vozenilek JA. Clinician behaviors in telehealth care delivery: a systematic review. *Adv Health Sci Educ*. 2017;22(4):869-888. doi:10. 1007/s10459-016-9717-2
- Crouch M, McKenzie H. The logic of small samples in interview-based qualitative research. *Soc Sci Inf.* 2006;45(4): 483-499. doi:10.1177/0539018406069584
- Flyvbjerg B. Five Misunderstandings About Case-Study Research. *Qual Ing.* 2006;12(2):219-245. doi:10.1177/1077800405284363
- Hsieh HF, Shannon SE. Three approaches to qualitative content analysis. Qual Health Res. *Nov.* 2005;15(9):1277-1288. doi:10. 1177/1049732305276687
- Hamilton AB, Finley EP. Qualitative methods in implementation research: An introduction. *Psychiatr Res.* 2019; 280:112516. doi:10.1016/j.psychres.2019.112516
- Papanicolas I, Woskie LR, Jha AK. Health Care Spending in the United States and Other High-Income Countries. *JAMA*. 2018; 319(10):1024. doi:10.1001/jama.2018.1150
- Eric C, Schneider AS, Doty MM, et al. Commonwealth Fund. https://www.commonwealthfund.org/publications/ fund-reports/2021/aug/mirror-mirror-2021-reflectingpoorly. Accessed November 29 2021.Mirror, Mirror 2021: Reflecting Poorly Health Care in the U.S. Compared to Other High-Income Countries.
- Zimmerman FJ, Anderson NW. Trends in Health Equity in the United States by Race/Ethnicity, Sex, and Income, 1993-2017. JAMA Netw Open. 2019;2(6):e196386. doi:10.1001/ jamanetworkopen.2019.6386
- Atkins D, Kilbourne A, Lipson L. Health Equity Research in the Veterans Health Administration: We've Come Far but Aren't There Yet. *Am J Publ Health*. 2014;104(S4):S525-S526. doi:10.2105/ajph.2014.302216
- Bauer UE, Briss PA, Goodman RA, Bowman BA. Prevention of chronic disease in the 21st century: elimination of the leading preventable causes of premature death and disability in the USA. *Lancet*. 2014;384(9937):45-52. doi:10.1016/s0140-6736(14)60648-6
- Boersma P, Black LI, Ward BW. Prevalence of Multiple Chronic Conditions Among US Adults. *Prev Chronic Dis.* 2020;17:E106. doi:10.5888/pcd17.200130
- Constand MK, Macdermid JC, Dal Bello-Haas V, Law M. Scoping review of patient-centered care approaches in healthcare. *BMC Health Serv Res.* 2014;14(1):271. doi:10. 1186/1472-6963-14-271
- Evans EA, Tennenbaum DL, Washington DL, Hamilton AB. Why Women Veterans Do Not Use VA-Provided Health and Social Services: Implications for Health Care Design and Delivery. J Humanist Psychol. 2019:0022167819847328. doi: 10.1177/0022167819847328

- Di Leone BAL, Wang JM, Kressin N, Vogt D. Women's veteran identity and utilization of VA health services. *Psychol Serv.* 2016;13(1):60-68. doi:10.1037/ser0000021
- Ouimette P, Vogt D, Wade M, et al. Perceived barriers to care among veterans health administration patients with posttraumatic stress disorder. *Psychol Serv.* 2011;8(3):212-223. doi:10. 1037/a0024360
- Turchik JA, McLean C, Rafie S, Hoyt T, Rosen CS, Kimerling R. Perceived barriers to care and provider gender preferences among veteran men who have experienced military sexual trauma: A qualitative analysis. *Psychol Serv.* 2013;10(2): 213-222. doi:10.1037/a0029959
- Turchik JA, Bucossi MM, Kimerling R. Perceived Barriers to Care and Gender Preferences Among Veteran Women Who Experienced Military Sexual Trauma: A Qualitative Analysis. *Military Behavioral Health.* 2014;2(2):180-188. doi:10.1080/ 21635781.2014.892410
- Marchand WR, Beckstrom J, Nazarenko E, et al. The Veterans Health Administration Whole Health Model of Care: Early Implementation and Utilization at a Large Healthcare System. *Mil Med*. 2020;185(11-12):e2150-e2157. doi:10.1093/milmed/usaa198
- Yeh CH, Kawi J, Ni A, Christo P. Evaluating Auricular Point Acupressure for Chronic Low Back Pain Self-Management Using Technology: A Feasibility Study. *Pain Manag Nurs*. 2021. doi:10.1016/j.pmn.2021.11.007
- Chen Y-W, Wang H-H. The Effectiveness of Acupressure on Relieving Pain: A Systematic Review. *Pain Manag Nurs*. 2014; 15(2):539-550. doi:10.1016/j.pmn.2012.12.005
- Mathersul DC, Mahoney LA, Bayley PJ. Tele-yoga for Chronic Pain: Current Status and Future Directions. *Glob Adv Health Med.* 2018;7:2164956118766011. doi:10.1177/2164956118766011
- 35. Bolton RE, Fix GM, Vandeusen Lukas C, Elwy AR, Bokhour BG. Biopsychosocial benefits of movement-based complementary and integrative health therapies for patients with chronic conditions. *Chron Illness*. 2020;16(1):41-54. doi:10.1177/1742395318782377

- Vogt D, Merker VL, Borowski S, Bokhour B, Kligler B. Beyond disease and dysfunction: Asking patients about their psychosocial well-being. Health Affairs Forefront. *September*; 7:2022. doi:10.1377/forefront.20220906.158672
- 37. Vogt D, Taverna EC, YI N, et al. Development and validation of a tool to assess military veterans' status, functioning, and satisfaction with key aspects of their lives. *Applied Psychology* and Health WellBeing. 2019;11(2):328-349.
- Thoits PA. Mechanisms linking social ties and support to physical and mental health. *J Health Soc Behav.* 2011;52(2): 145-161. doi:10.1177/0022146510395592
- Fisher EB, Ayala GX, Ibarra L, et al. Contributions of Peer Support to Health, Health Care, and Prevention: Papers from Peers for Progress. Ann Fam Med. *Aug.* 2015;13(suppl 1Suppl 1):S2-S8. doi:10.1370/afm.1852
- Suntai Z, White B. Social isolation among older veterans: findings from the National Health and Aging Trends Study. *Aging Ment Health.* 2021:1-8. doi:10.1080/13607863.2021.1942434
- Wilson G, Hill M, Kiernan MD. Loneliness and social isolation of military veterans: systematic narrative review. *Occup Med.* 2018;68(9):600-609. doi:10.1093/occmed/kqy160
- Drake C, Zhang Y, Chaiyachati KH, Polsky D. The Limitations of Poor Broadband Internet Access for Telemedicine Use in Rural America: An Observational Study. *Ann Intern Med.* 2019;171(5):382-384. doi:10.7326/m19-0283
- Eberly LA, Kallan MJ, Julien HM, et al. Patient Characteristics Associated With Telemedicine Access for Primary and Specialty Ambulatory Care During the COVID-19 Pandemic. *JAMA Netw Open.* 2020;3(12):e2031640. doi:10.1001/ jamanetworkopen.2020.31640
- Lopez AM, Lam K, Thota R. Barriers and Facilitators to Telemedicine: Can You Hear Me Now? *Am Soc Clin Oncol Educ Book.* 2021;41:25-36. doi:10.1200/edbk\_320827
- Edmunds M, Tuckson R, Lewis J, et al. An Emergent Research and Policy Framework for Telehealth. *EGEMS (Wash DC)*. 2017;5(2):1303-1303. doi:10.13063/2327-9214.1303