

—  
THE **TeleBehavioral Health Summit**  
—

**Welcome!**

**Title:**

Understanding Unequal Uptake of Digital Mental Health Tools among Diverse Patient Populations

**Speaker:**

Jan A. Lindsay, PhD



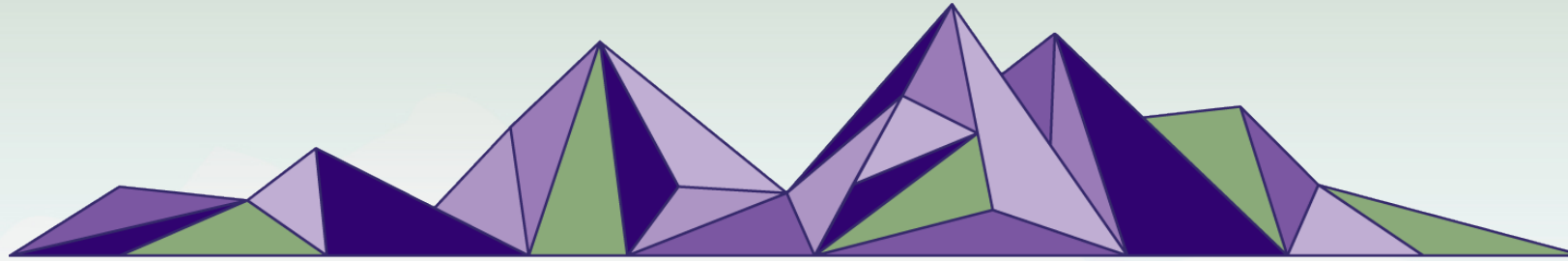
THE **TeleBehavioral Health Summit**

## A few notes.....

- ✓ No TeleBH Summit speakers or planners have any relevant conflicts of interest to disclose. Other disclosures have been mitigated.
- ✓ Today's talk is purely for informational purposes; and is not to be regarded as legal advice. Please consult with legal counsel, as well as current legislative and regulatory sources, for accurate and up-to-date information.
- ✓ WHOVA Q&A for content questions for speakers.
  - ✓ WHOVA chat for logistics questions and technical support.
- ✓ Evaluation → Certificate of Attendance and/or CME credits.

We gratefully acknowledge support from:





# THE **TeleBehavioral Health Summit**

## Understanding Unequal Uptake of Digital Mental Health Tools among Diverse Patient Populations

**Jan A. Lindsay, PhD**

Co-Director, SC MIRECC

Associate Professor, Baylor College of Medicine

Core Investigator, IQuEST (HSR&D)

Health Policy Fellow, Baker Institute for Public Policy, Rice University

**UW Medicine**  
HARBORVIEW  
MEDICAL CENTER  
BEHAVIORAL HEALTH INSTITUTE



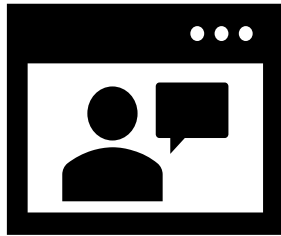
Washington State  
**Health Care Authority**

# Learning Objectives

1. Demonstrate an understanding of the importance of new technology in changing mental healthcare across clinical settings and populations.
2. Utilize new evaluation strategies for determining evidence-based digital mental health technologies.
3. Understand health equity considerations with utilization of digital mental health tools and possible solutions for engaging underserved patient populations.

# What is Digital Mental Health?

Video  
Telehealth



Mobile  
Apps



Online/  
Web-Based  
Programs



Wearables



# Video Telehealth

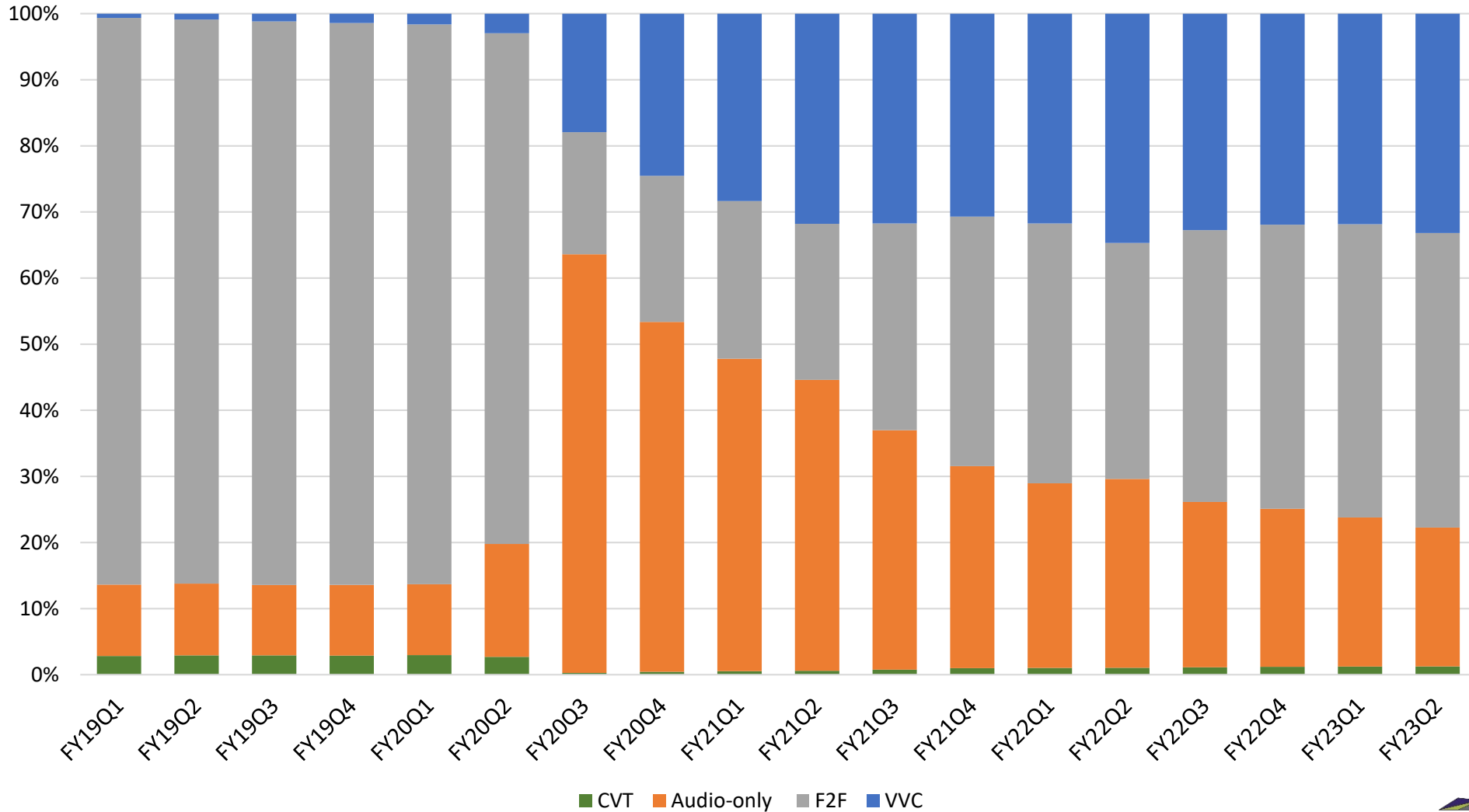
Clinical Effectiveness

Attrition

Therapeutic Alliance

Satisfaction

# Mental Health Encounters by Modality





# dig·it·al di·vide

noun

the gulf between those who have ready access to computers and the Internet, and those who do not. "a worrying "digital divide" based on educational attainment and income"



American Psychologist

https://doi.org/10.1037/0893-3200.68.001

## Patient and Provider Predictors of Telemental Health Use Prior to and During the COVID-19 Pandemic Within the Department of Veterans Affairs

Samantha L. Connolly<sup>1, 2</sup>, Kelly L. Stolzmann<sup>1</sup>, Leonie Heyworth<sup>3, 4</sup>, Jennifer L. Sullivan<sup>1, 5</sup>, Stephanie L. Shimada<sup>5, 6, 7</sup>, Kendra R. Weaver<sup>8</sup>, Jan A. Lindsay<sup>9, 10, 11</sup>, Mark S. Bauer<sup>1, 2</sup>, and Christopher J. Miller<sup>1, 2</sup>

## Advances in Psychotherapy for Older Adults Using Video-to-Home Treatment

Jennifer Freytag, PhD<sup>a,b,\*</sup>, Hilary N. Touchett, PhD, RN<sup>a,b</sup>, Jennifer L. Bryan, PhD<sup>a,b,c</sup>, Jan A. Lindsay, PhD<sup>a,b,c</sup>, Christine E. Gould, PhD<sup>d,e</sup>

## Assessing Telemedicine Unreadiness Among Older Adults in the United States During the COVID-19 Pandemic

Kenneth Lam, MD<sup>1</sup>; Amy D. Lu, MD<sup>1</sup>; Ying Shi, PhD<sup>1</sup>; et al

> Author Affiliations | Article Information

JAMA Intern Med. Published online August 3, 2020. doi:10.1001/jamainternmed.2020.2671

## Getting Connected: a Retrospective Cohort Investigation of Video-to-Home Telehealth for Mental Health Care Utilization Among Women Veterans

Jan A. Lindsay, PhD<sup>1,2,3</sup>, Alexandra Caloudas, PhD<sup>2</sup>, Julianna Hogan, PhD<sup>1,2,3</sup>, Anthony H. Ecker, PhD<sup>1,2,3</sup>, Stephanie Day, PhD<sup>1,2,3</sup>, Geetie Day, MPH<sup>2</sup>, Samantha L. Connolly, PhD<sup>4,5</sup>, Hilary Touchett, PhD, RN<sup>2</sup>, Kendra R. Weaver, PsyD<sup>2</sup>, and Amber B. Amspoker, PhD<sup>1,2,3</sup>

## Patterns of Telehealth Use for Mental Health Treatment Among Hispanic Veterans

Emmanuel Guajardo, MD,<sup>1,2</sup> Amber B. Amspoker, PhD,<sup>1-3</sup> Melinda Anne Stanley, PhD,<sup>2</sup> Julianna Hogan, PhD,<sup>1-3</sup> Anthony H. Ecker, PhD,<sup>1-3</sup> and Jan A. Lindsay, PhD<sup>1-4</sup>

## Disparities in Video Telehealth Use During Rapid Mental Health Care Virtualization: Rural/Urban Differences in Native Veterans (accepted)

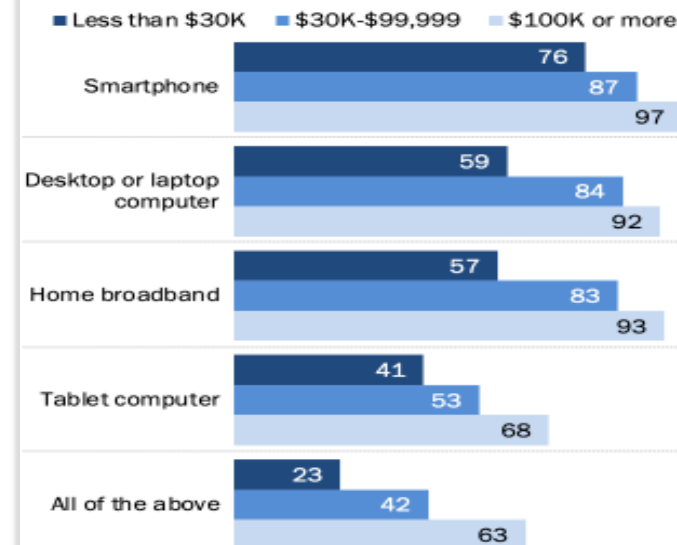
Kusters, I. S., Amspoker, A. B., Frosio, K., Day, S. C., Day, G., Ecker, A., Hogan, J., Shore, J., & Lindsay, J. A.

## Black Veteran Use of Video Telehealth for Mental Health Care. (under review)

Day, G., Ecker, A. H., Amspoker, A. B., Dawson D. B., & Lindsay, J. A.

## Americans with lower incomes have lower levels of technology adoption

% of U.S. adults who say they have each of the following, by household income



Note: Respondents who did not give an answer are not shown. Source: Survey of U.S. adults conducted Jan. 25-Feb. 8, 2021.

PEW RESEARCH CENTER





THE TeleBehavioral Health Summit



COMMENTARY

## The Importance of Video Visits in the Time of COVID-19

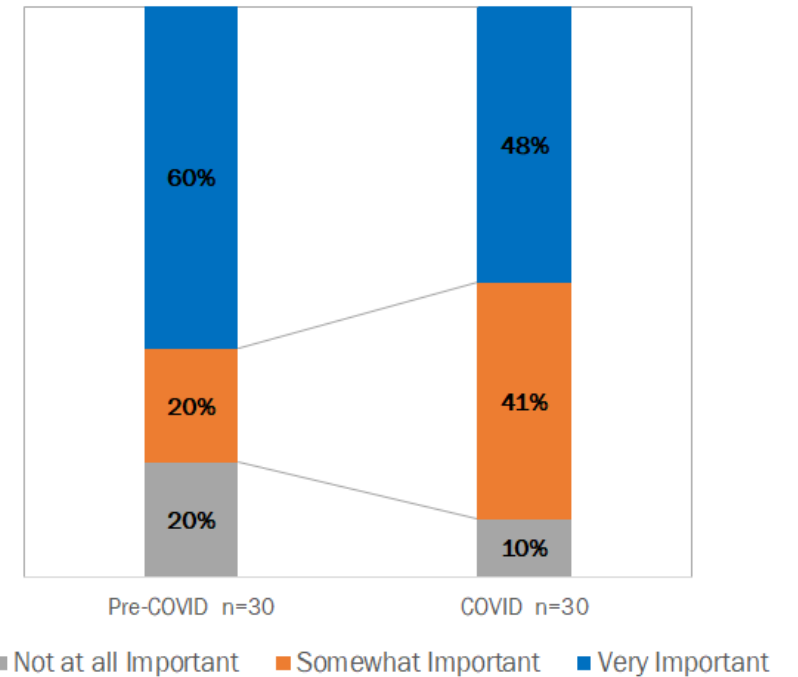
Jan A. Lindsay, PhD <sup>1,2,3</sup> Julianna B. Hogan, PhD<sup>1,2,3</sup> Anthony H. Ecker, PhD <sup>1,2,3</sup>  
Stephanie C. Day, PhD<sup>1,2,3</sup> Patricia Chen, PhD<sup>1,3</sup> & Ashley Helm, MA<sup>1,3</sup>

1 Houston VA HSR&D Center for Innovations in Quality, Effectiveness and Safety, Michael E. DeBakey VA Medical Center, Houston, Texas  
2 Menninger Department of Psychiatry and Behavioral Sciences, Baylor College of Medicine, Houston, Texas  
3 VA South Central Mental Illness Research, Education and Clinical Center, Houston, Texas

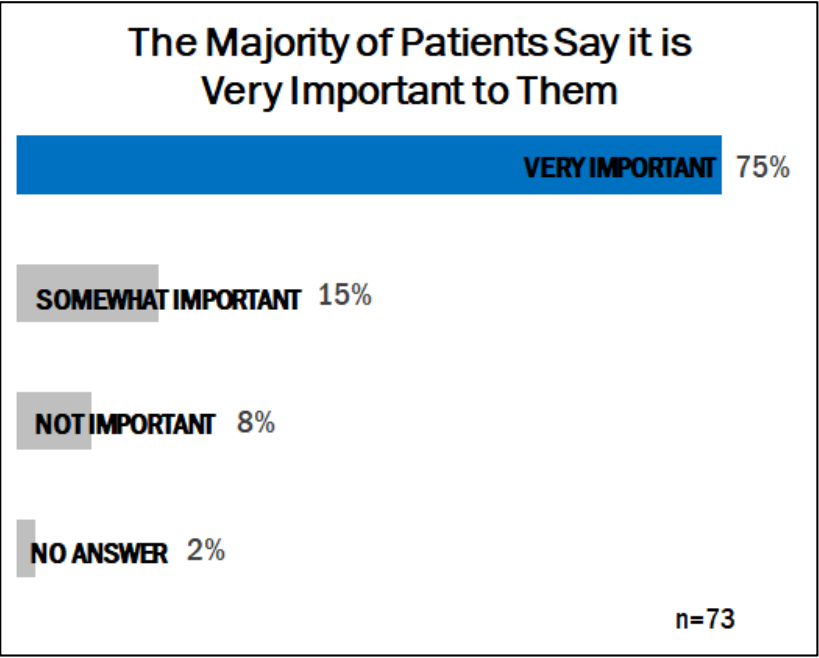
“ We could...see into their home, does it look unsafe, is there hoarding going on—which a lot of our patients have that problem, and it's not safe. They trip over things, they break hips. Is there something else going on? Is it unsuitable for habitation? Lots of people have caved ceilings, lack of utilities, and things like that. It does give us a bird's eye view of their home, if they're willing to share that, and that helps with safety. ”

“ The patient was an older woman, who right away wasn't wanting to come in due to Parkinson's and age. She was a patient you really worry about [the risk]. You really want to lay eyes on her, if possible. [VTH] has been a game changer because she has a history of complex trauma and severe depression. Someone you don't want to have out there flopping in the wind at a time like this. ”

Patient Ratings on the Importance of Video  
More People Recognize the Importance of Video



# Seeing the Value of Video



## Veteran Voice: How Video Makes a Difference

“We had to use the phone one time, and the next time, I really **appreciated video**. The contact **formalized** the appointment, [added] **accountability** to adhere to that time and be there.”

“I felt **more of a connection** with her, felt like she really cared and was listening. We weren't in the same room, but she could see my reactions and vice versa. It's **better than just being on the phone.**”

Chen P. V., Helm A., Fletcher T., Wassef, M., Hogan, J., Amspoker, A., Cloitre, M. & Lindsay, J. (2021). Seeing the value of video: A qualitative study on patient preference for using video in a Veteran Affairs telemental health program evaluation. *Telemedicine Reports*, 2.1, 156-162. DOI: 10.1089/tmr.2021.0005

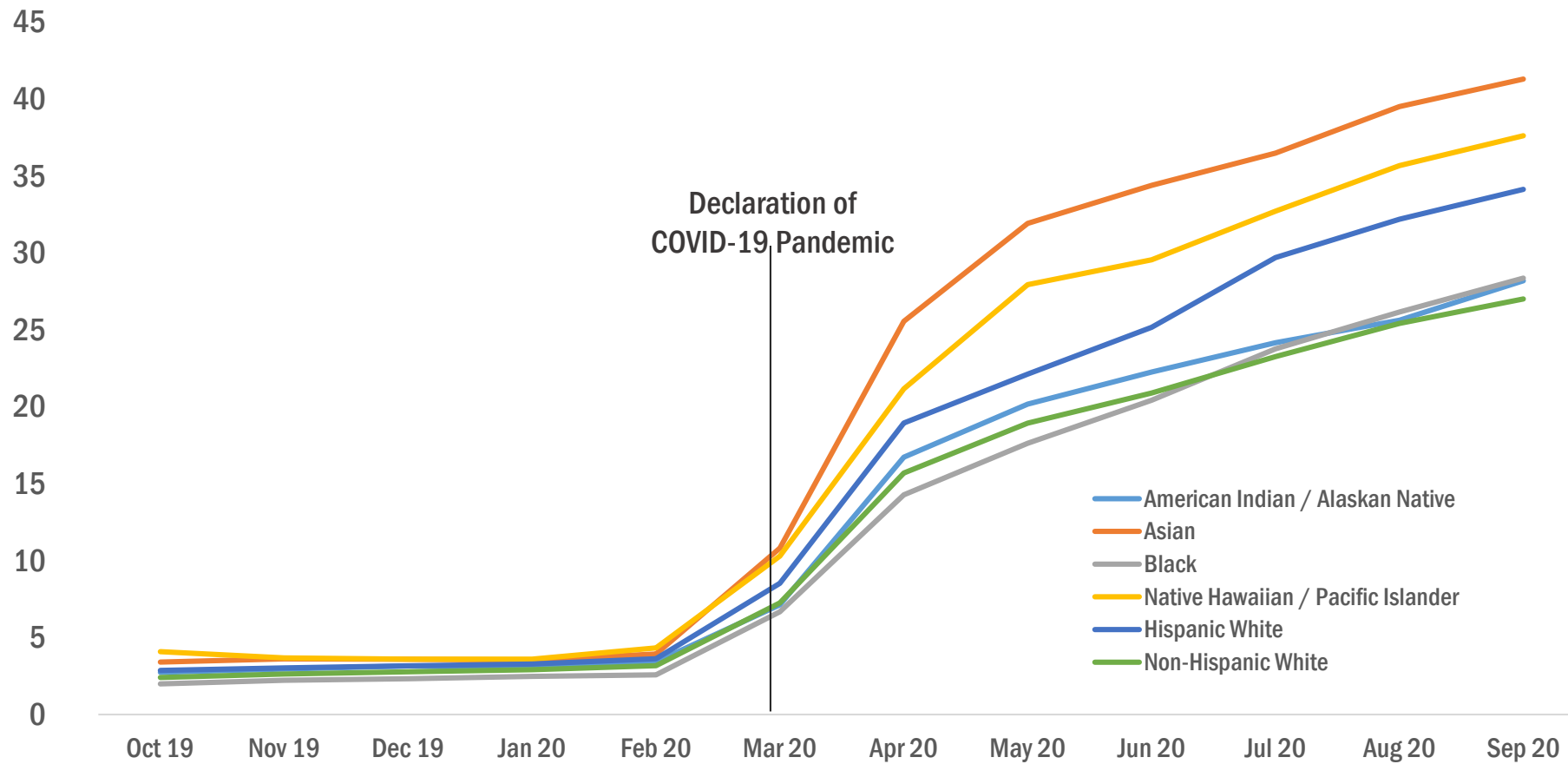


# Beyond Preference: Patients Recognize Importance of Video

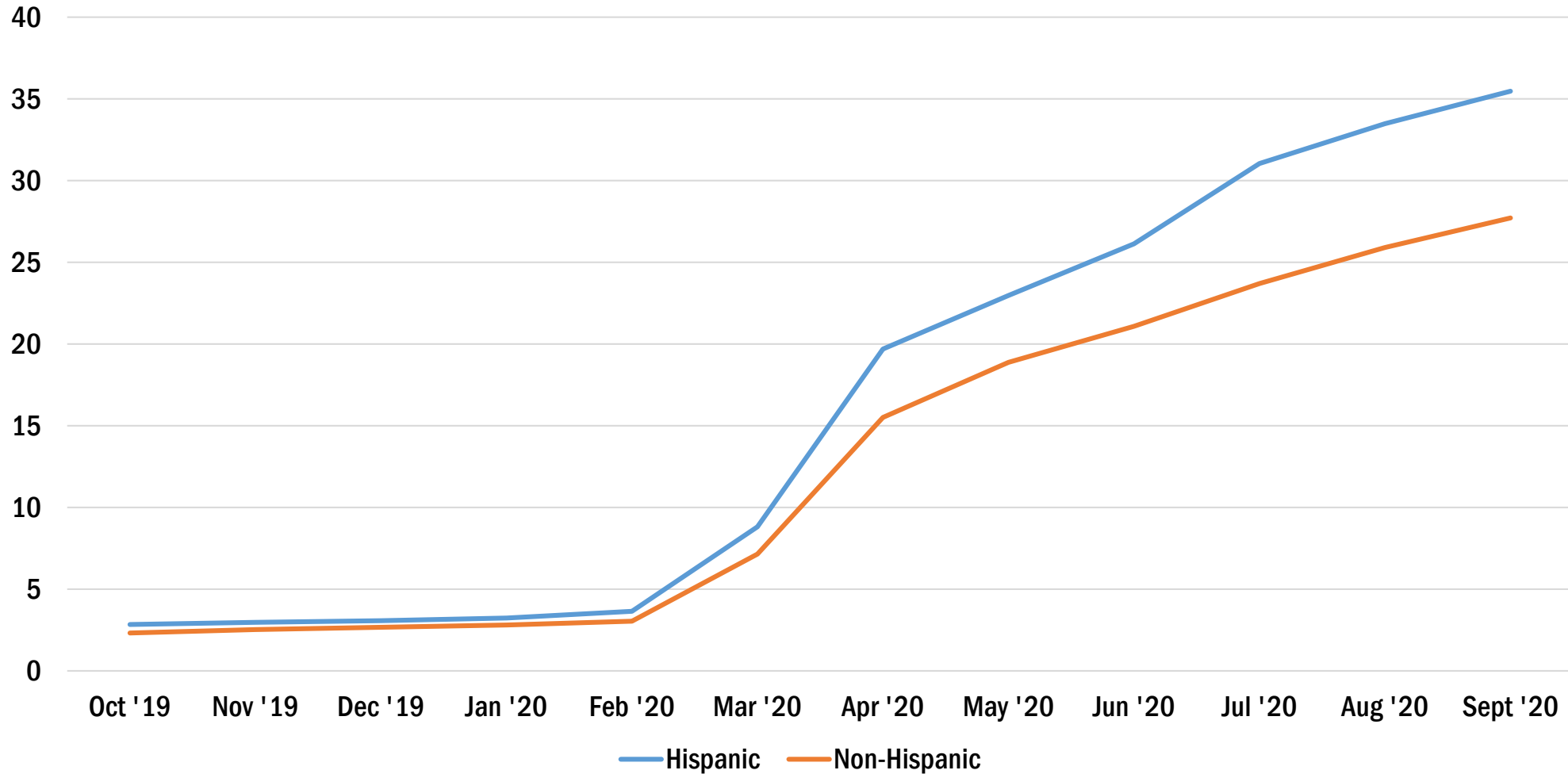


“As much as my therapist wants me to be engaged... I love the phone. I like talking on the phone because I can do other things. But mainly because of my children, I can go in the room, the kids are ok for an hour, instead of waiting in the lobby or whatever. Which I don't feel comfortable... Tough [to choose] between phone [and VTH]. My therapist] likes me to stop what I'm doing and talk to her over the video. But over the phone I could get away with that.”

# Percentage of VTH Utilization among Racial and Ethnic Groups

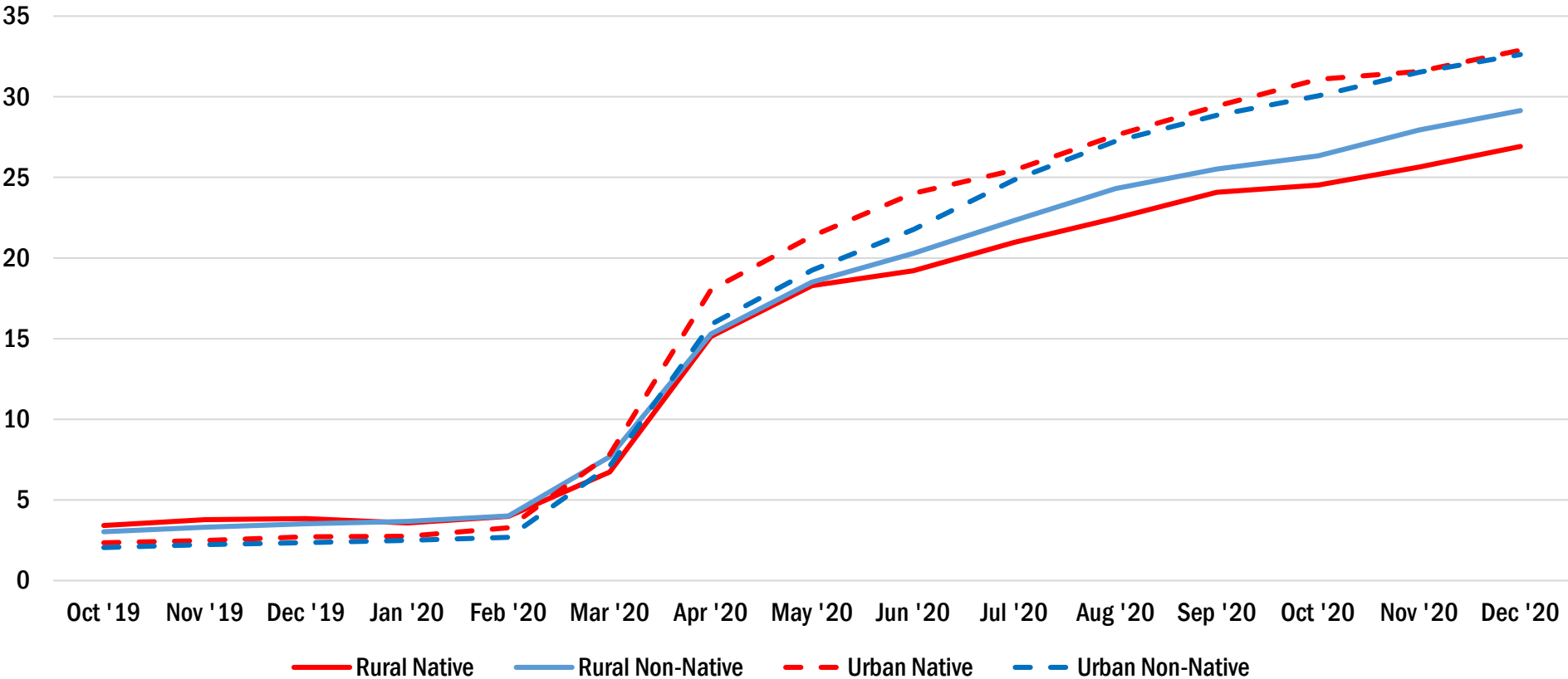


# Percentage of VTH Utilization by Ethnicity



Guajardo, E., Amspoker, A. B., Stanley, M. A., Hogan, J., Ecker, A. H., & Lindsay, J. A. (2022). Patterns of Telehealth Use for Mental Health Treatment Among Hispanic Veterans. *Telemedicine and e-Health*.

# Mean Percentage of VTH Mental Health Encounters Over Time by Rurality and Native Status

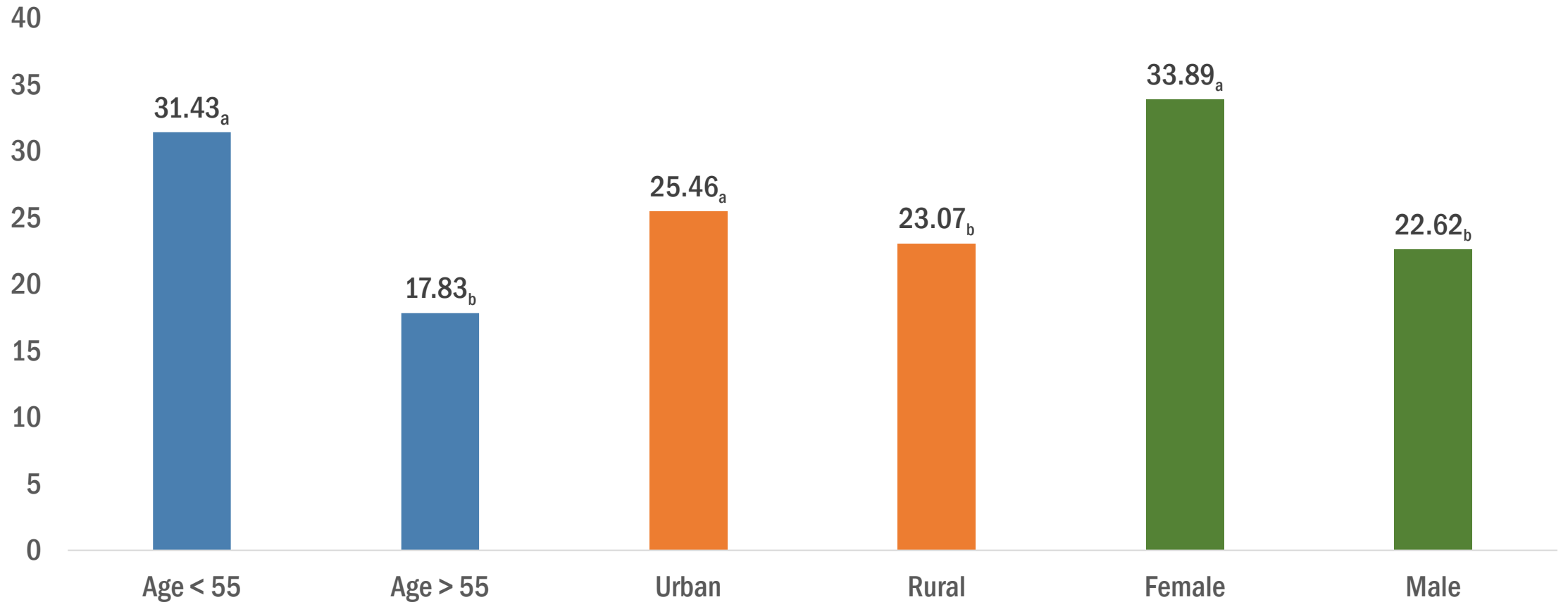


Disparities in Video Telehealth Use During Rapid Mental Health Care Virtualization: Rural/Urban Differences in Native Veterans  
(accepted) Kusters, I. S., Amspoker, A. B., Frosio, K., Day, S. C., Day, G., Ecker, A., Hogan, J., Shore, J., & Lindsay, J. A.



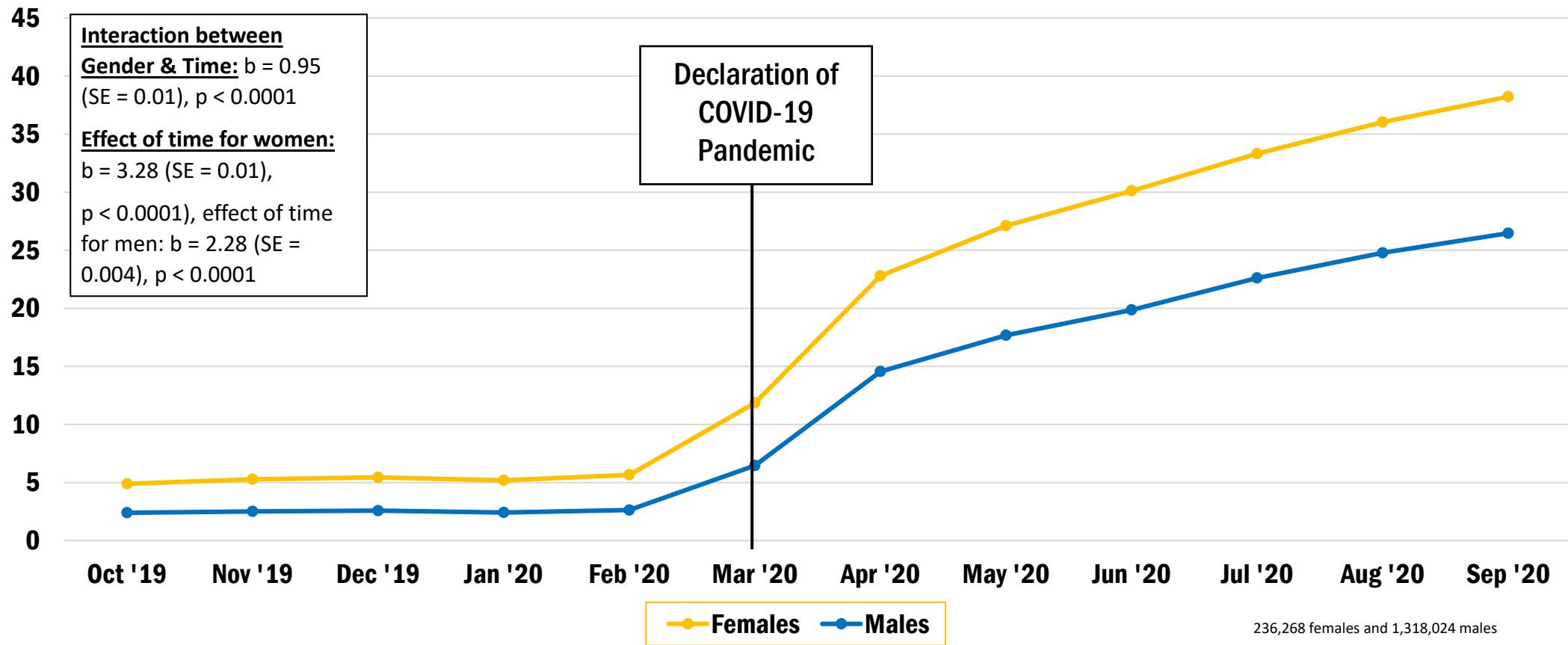
# Percentage of VTH Mental Health Encounters among Black Veterans 6 months after onset of COVID-19

*a and b differ from each other at  $p < 0.05$*



Black Veteran Use of Video Telehealth for Mental Health Care. (under review).  
Day, G., Ecker, A. H., Amspoker, A. B., Dawson D. B., & Lindsay, J. A.

# Percentage of VTH Mental Health Encounters by Gender



Lindsay, J. A., Caloudas, A.B., Hogan, J., Ecker, A. H., Day, S.C., Day, G., Connolly, S. L., Touchett, H., Weaver, K. R., & Amspoker, A. B. (in press). Getting connected: A Retrospective Cohort Investigation of video to-home telehealth for mental health care utilization among women veterans. Journal of General Internal Medicine.



# Veteran Voices: VTH Benefits for Female Veterans

## Avoiding Difficult Situations:

“Something for me where I didn’t have to go to VA...[Going to VA] makes me angry, stirs up emotions...”

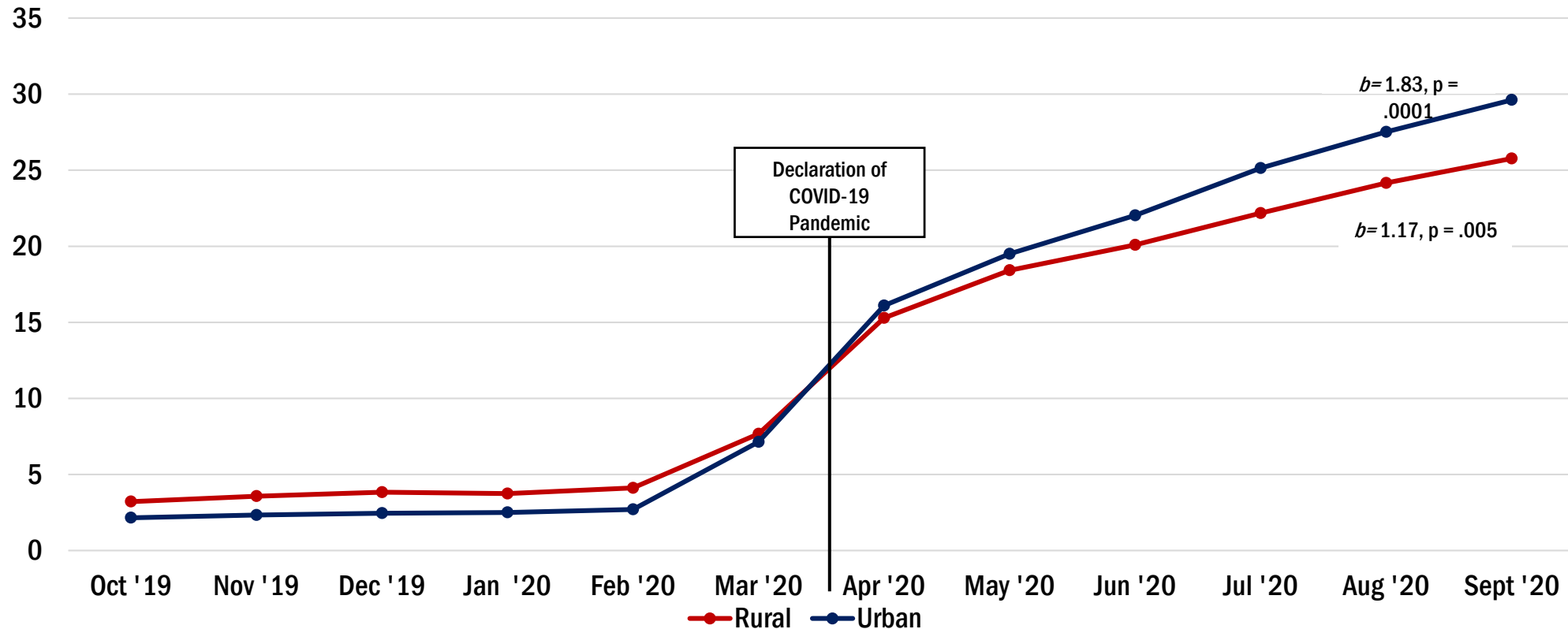
## Easing Child Care:

“Convenience with time and scheduling, and I don’t always have to bring my son.”

## Providing a Comfortable Environment:

“It is nice when you’re talking about topics that get you extremely emotional- to be in the comfort of your own home where you feel very comfortable.”

# Percentage of VTH Mental Health Encounters by Rurality



557,668 rural and 1,384,093 urban

Hogan, J., Amspoker, A. B., Walder, A., Hamer, J., Lindsay, J. A., & Ecker, A. H. (2022). Differential impact of COVID-19 on the use of tele-mental health among veterans living in urban or rural areas. *Psychiatric Services*, 73(12), 1393-1396.



# Veteran Voices: VTH Benefits for Rural Veterans

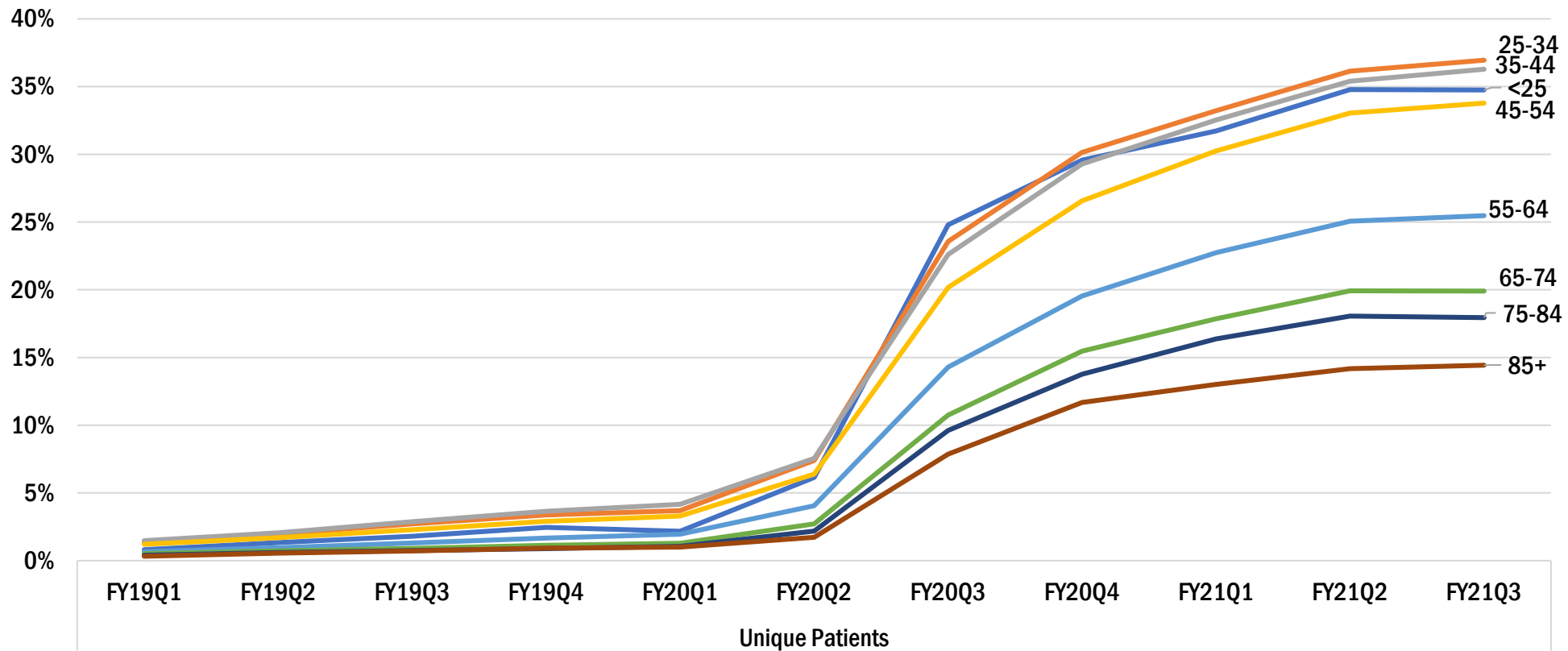
## Increasing Access

“If you live way out in the country, you may not have access to exactly this, medical care, if you don’t have telehealth.”

## Overcoming Distance Barriers

“For me to get to my CBOC, it's 55 miles. The main hospital is 100 miles. That’s a 2.5-hour drive. I wake up with deer and possum and raccoons in my yard. With VVC, I don’t even have to shower... I check into that room about 5 minutes and wait.”

# Patients 55+ Use VTH at Lower Rates than Younger Age Groups



# Veteran Voices: VTH Use Among Older Veterans

## Technology Accommodates a Slower Pace of Life

“I do have arthritis and it’s a little hard for me to get going and moving in the morning. So, I have plenty of time to get ready for the session on the telehealth.”

## VTH Care during COVID

“The only way you will get into the VA is if you wear a mask, and I won’t wear a mask due to COPD. It was either telehealth at home or drive to [CBOC].”

## Caregiving to Overcome Technological Difficulties

“My daughter... She worked me through it and showed me what to do. The second time she showed me what to do. After that I was on my own, and I didn’t have any trouble except, once I got disconnected and I didn’t know what to do.”

# Use of Telehealth with Older Adults

## Benefits

- Improve Access
- Safety
- Timeliness of dx and care
- Decrease Isolation
- Reduce cost
- High Satisfaction
- Mobility impairment

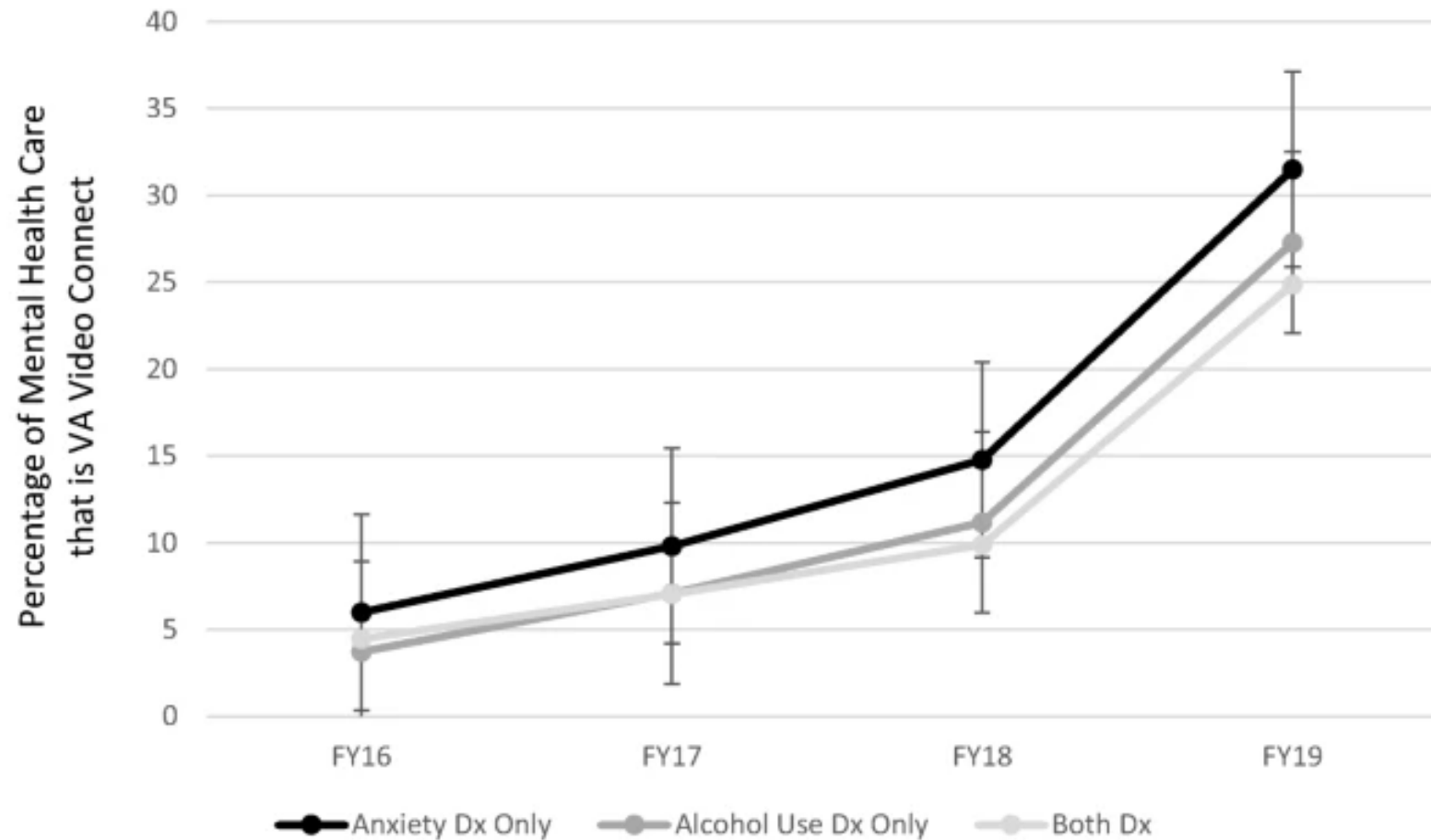
## Barriers

- Tech confidence
- Privacy concerns
- Failed attempt increases isolation
- Lack of equipment
- Digital health literacy
- Provider assumptions and hesitancy

## Solutions

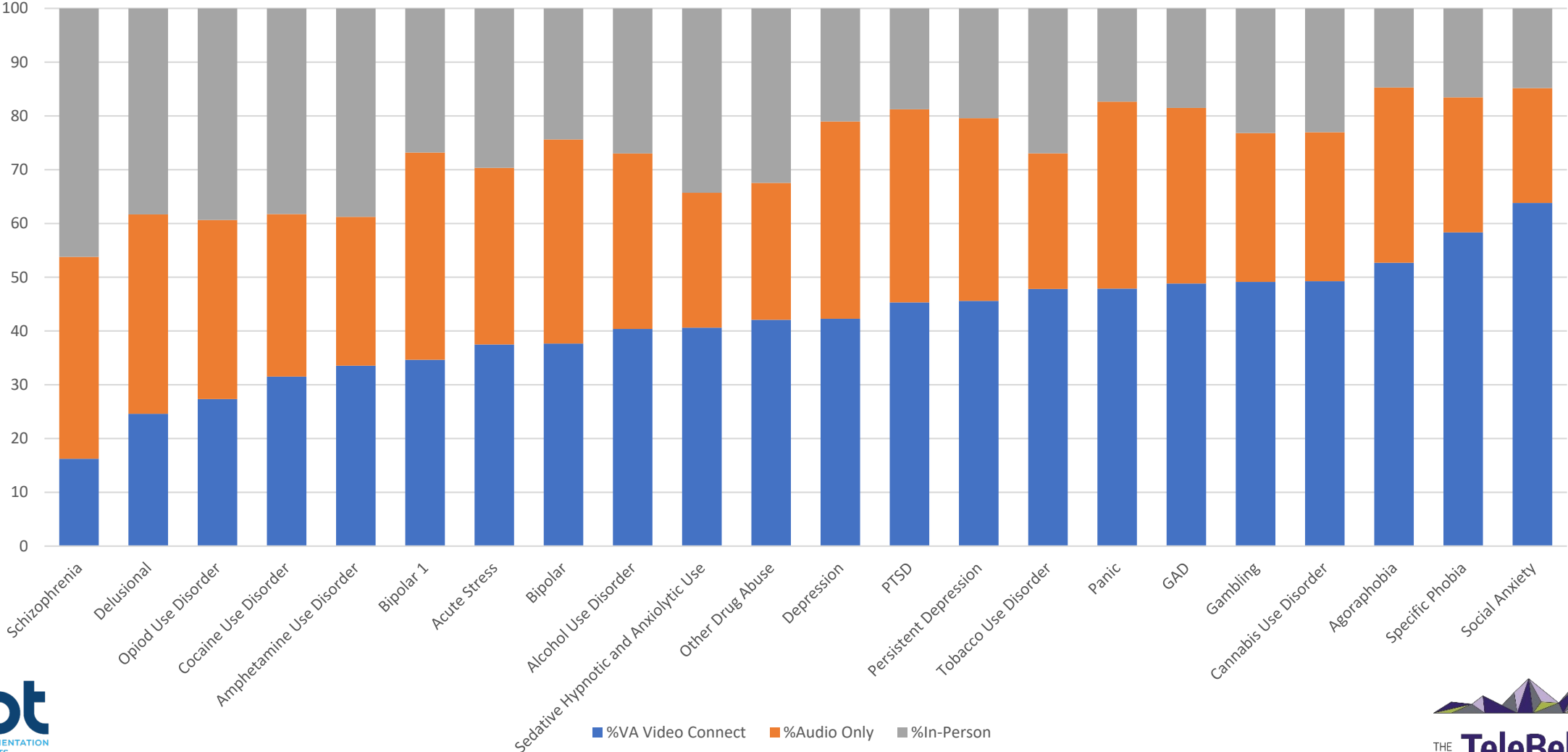
- Adaptive equipment
- Repetition and practice
- Providing paper copies of written instructions
- Provider training
- Peer support

# Mental Health and SUD Comorbidity Impacts Access to VVC



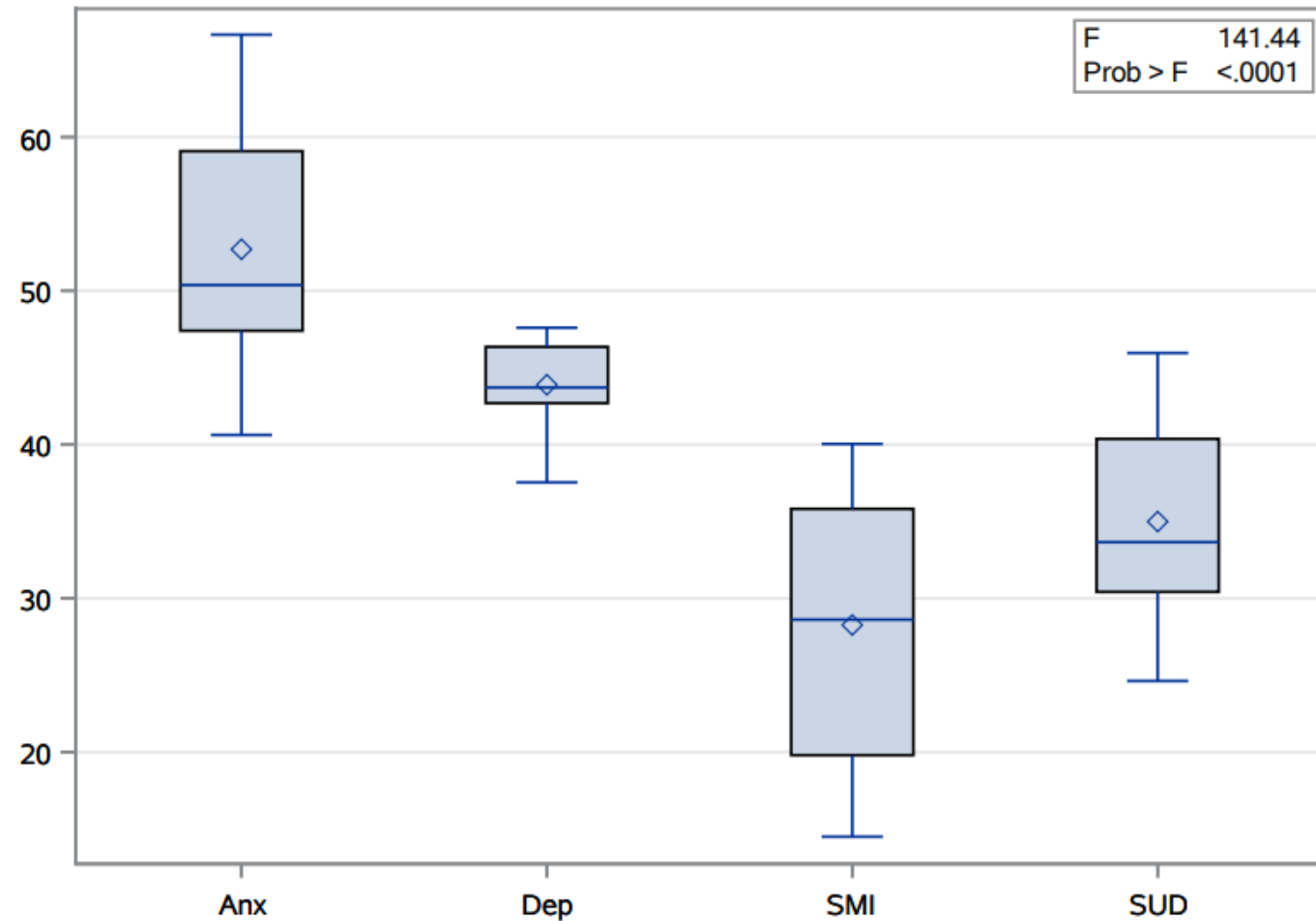
Ecker, A. H., Amspoker, A. B., Hogan, J. B., & Lindsay, J. A. (2021). The Impact of Co-occurring Anxiety and Alcohol Use Disorders on Video Telehealth Utilization Among Rural Veterans. *Journal of technology in behavioral science*, 6(2), 314-319

# Percentage of MH Encounters by Specific Diagnosis in FY21

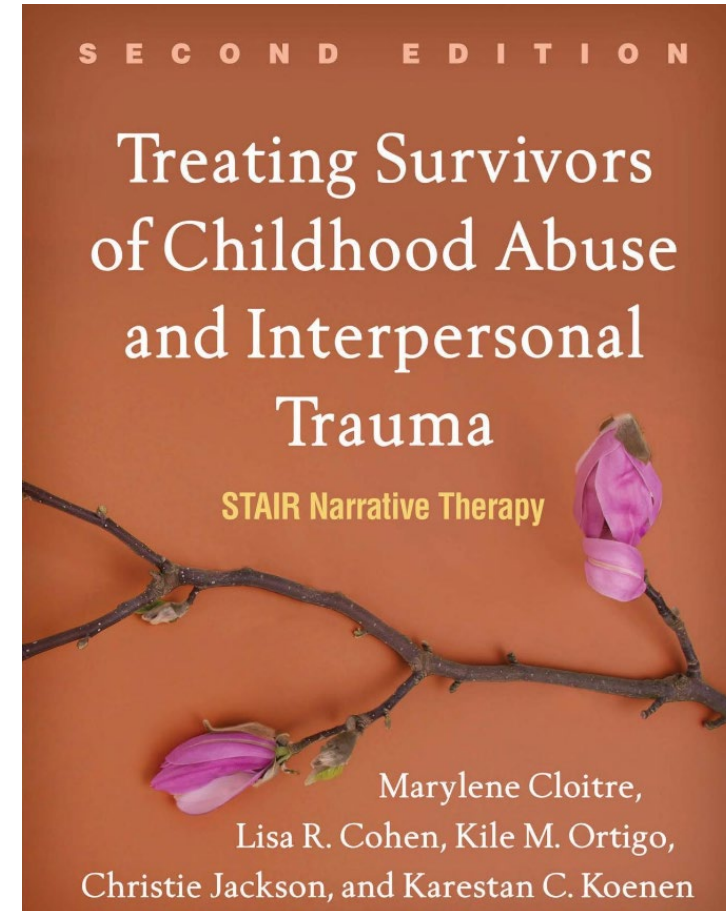




# Percentage of MH Encounters Delivered via VVC by Diagnosis Category in FY21



# Skills Training in Affective and Interpersonal Regulation (STAIR)

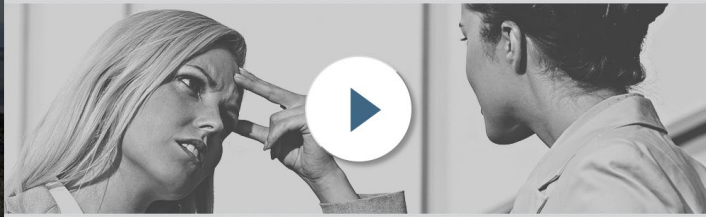


# webSTAIR

web-based version of Skills Training in Affective and Interpersonal Regulation (STAIR), supported by Office of Rural Health (ORH)

7. Identifying Your Relationship Patterns COURSE LIST

What kind of boundary is this?



Listen to this exchange, and then decide. Click Play.

Not Close Enough Too Close Ideal

Back

Disagree with what you see, or have other concerns? [Click here to tell us!](#)

8. Changing Relationship Patterns – Focus on Assertiveness & Closeness COURSE LIST

### You Can Improve Your Relationship Patterns

If you've completed the previous modules, you've hopefully also been using the Relationships Patterns Worksheet. Understanding your patterns is an important step to practicing new skills with others.

As you learned, it's easy to forget or overlook how important healthy boundaries are. To set boundaries, you need to be flexible. The right communication style depends on your goals and the type of relationship. This means you need to balance assertiveness and closeness.

Click each image to learn more about these parts of a healthy relationship.




Next

Disagree with what you see, or have other concerns? [Click here to tell us!](#)

Feelings Wheel BACK TO TOOLBOX

### Emotions Wheel

Now that you know the basics about what an emotion actually is, it's time to get to know them in more detail. Here are some key emotional words to help you start thinking and talking about your emotions. Click as many emotions as you want to learn more. When you're done exploring the wheel, click Close.



Click each emotion to read more about them.

hurt  
hostile  
frustrated  
irritated  
furious  
explosive  
hateful  
critical  
resentful  
disgusted  
betrayed  
bitter

How I feel physically:  
"My face is red"

What I think:  
"I want to run away"

What I believe:  
"People think I'm worthless"


Back Close

2. Managing Emotions – Focus on Body COURSE LIST

### Have you experienced any of these situations?

Look at the situations below. Chances are that one or two of them bother you more than the others. Maybe all of them have caused problems for you in the past. That's okay. We're going to take a closer look at them now.

Choose a situation below to explore.



Back Next

Cloitre, M., Cohen, L. R., Ortigo, K. M., Jackson, C., & Koenen, K. C. (2020). Treating survivors of childhood abuse and interpersonal trauma: STAIR narrative therapy. Guilford Publications.


# Feasibility of Coaches to Support an Online Intervention



## CLINICAL RESEARCH ARTICLE



## A Resource Building Virtual Care Programme: improving symptoms and social functioning among female and male rural veterans

Ashley Bauer<sup>a</sup>, Amber B. Amspoker<sup>b,c</sup>, Terri L. Fletcher<sup>b,d,e</sup>, Christie Jackson<sup>f</sup>, Adam Jacobs<sup>a</sup>, Julianna Hogan<sup>b,d,e</sup>, Rayan Shammet<sup>a</sup>, Sarah Speicher<sup>a</sup>, Jan A. Lindsay<sup>b,d,e</sup> and Marylène Cloitre <sup>a,g</sup>

<sup>a</sup>National Center for PTSD Dissemination and Training Division, VA Palo Alto Health Care System, Palo Alto, CA, USA; <sup>b</sup>VA HSR&D Houston Center of Innovations in Quality, Effectiveness and Safety, Michael E. DeBakey VA Medical Center, Houston, TX, USA; <sup>c</sup>Department of Medicine, Baylor College of Medicine, Houston, TX, USA; <sup>d</sup>Menninger Department of Psychiatry and Behavioral Sciences, Baylor College of Medicine, Houston, TX, USA; <sup>e</sup>VA South Central Mental Illness Research, Education and Clinical Center, Houston, TX, USA; <sup>f</sup>VA New York Harbor Healthcare System, New York, NY, USA; <sup>g</sup>Department of Psychiatry and Behavioural Sciences, Stanford University, Stanford, CA, USA

### ABSTRACT

**Background:** Veterans have higher rates of PTSD and depression compared to the general population and experience substantial functional impairment. Impairment in social functioning has been a significant concern among Veterans, particularly rural Veterans, who have limited access to mental health care and are at risk for social isolation.

**Objective:** A mixed-method study was implemented to evaluate the feasibility and effectiveness of webSTAIR, a web-based skills training programme, paired with home-based telehealth sessions. It was hypothesized that the programme would lead not only to reductions in PTSD and depression but also to improvements in social functioning.

**Method:** Participants were 80 trauma-exposed Veterans enrolled in rural-serving VHA facilities with clinically elevated symptoms of either PTSD or depression. The study directed substantial outreach efforts to rural women Veterans and those who have experienced military sexual trauma (MST).

**Results:** Significant improvements were obtained with PTSD and depression symptoms as well as in social functioning, emotion regulation, and interpersonal problems at post-treatment and 3-month follow-up. Ratings of therapeutic alliance were high as were reports of overall satisfaction in the programme. There were no differences by gender or MST status in symptom outcomes or satisfaction.

**Conclusions:** The results support the feasibility and effectiveness of this integrated tele-

### ARTICLE HISTORY

Received 27 August 2020  
Revised 16 November 2020  
Accepted 23 November 2020

### KEYWORDS

Rural veterans; MST; online trauma therapy; telemental health; ptsd; social functioning; interpersonal problems; emotion regulation

### PALABRAS CLAVE

veteranos rurales; MST; terapia de trauma en línea; tele salud mental; PTSD; funcionamiento social; problemas interpersonales; regulación de las emociones



Bauer, A., Amspoker, A.B., Fletcher, T.L., Jackson, C., Jacobs, ...& Cloitre, M. (2021) A Resource Building Virtual Care Programme: A mixed-methods evaluation program designed to evaluate the feasibility, satisfaction and effectiveness of an online intervention program supported by video-coaching sessions with trauma-exposed rural Veterans. *European Journal of Psychotraumatology*

# Presence of a Coach Critical to Program Success

*"I liked it because I was able to work at my own pace. I was able to work it around my schedule instead of working my schedule around it. I liked doing the modules beforehand because we were able to talk about them better when I'd done them first."*

DOI: 10.1111/jrh.12628

ORIGINAL ARTICLE

THE JOURNAL OF RURAL HEALTH



## Increasing access to care for trauma-exposed rural veterans: A mixed methods outcome evaluation of a web-based skills training program with telehealth-delivered coaching

Terri L. Fletcher PhD<sup>1,2,3</sup> | Amber B. Amspoker PhD<sup>1,3,4</sup> | Miryam Wassef LCSW<sup>1,3</sup> | Julianna B. Hogan PhD<sup>1,2,3</sup> | Ashley Helm MA<sup>1,3</sup> | Christie Jackson PhD<sup>5</sup> | Adam Jacobs MS<sup>6</sup> | Rayan Shammet MA<sup>6</sup> | Sarah Speicher MS<sup>6</sup> | Jan A. Lindsay PhD<sup>1,3,4</sup> | Marylène Cloitre PhD<sup>6,7</sup>

<sup>1</sup> VA HSR&D Houston Center of Innovations in Quality, Effectiveness and Safety, Michael E. DeBakey VA Medical Center, Houston, Texas, USA

<sup>2</sup> Menninger Department of Psychiatry and Behavioral Sciences, Baylor College of Medicine, Houston, Texas, USA

<sup>3</sup> VA South Central Mental Illness Research, Education and Clinical Center, Houston, Texas, USA

<sup>4</sup> Baylor College of Medicine, Department of Medicine, Houston, Texas, USA

<sup>5</sup> VA New York Harbor Healthcare System, New York, New York, USA

<sup>6</sup> National Center for PTSD Dissemination and Training Division, VA Palo Alto Health Care System, Palo Alto, California, USA

<sup>7</sup> Department of Psychiatry and Behavioral Sciences, Stanford University, Stanford, California, USA

Correspondence

### Abstract

**Purpose:** While rural veterans with trauma exposure report high rates of posttraumatic stress disorder (PTSD), depression, and functional impairment, utilization of health services is low. This pilot study used mixed qualitative and quantitative methods to evaluate the potential benefits of a transdiagnostic web-based skills training program paired with telehealth-delivered coaching to address a range of symptoms and functional difficulties. The study directed substantial outreach efforts to women veterans who had experienced military sexual trauma given their growing representation in the Veterans Healthcare Administration (VHA) and identified need for services.

**Methods:** Participants were 32 trauma-exposed veterans enrolled in rural-serving VHA facilities who screened positive for either PTSD or depression. Symptoms of PTSD, depression, emotion regulation, and interpersonal problems were assessed at baseline, midpoint, posttreatment, and 3-month follow-up. Veterans completed exit interviews to identify benefits and limitations of the program.

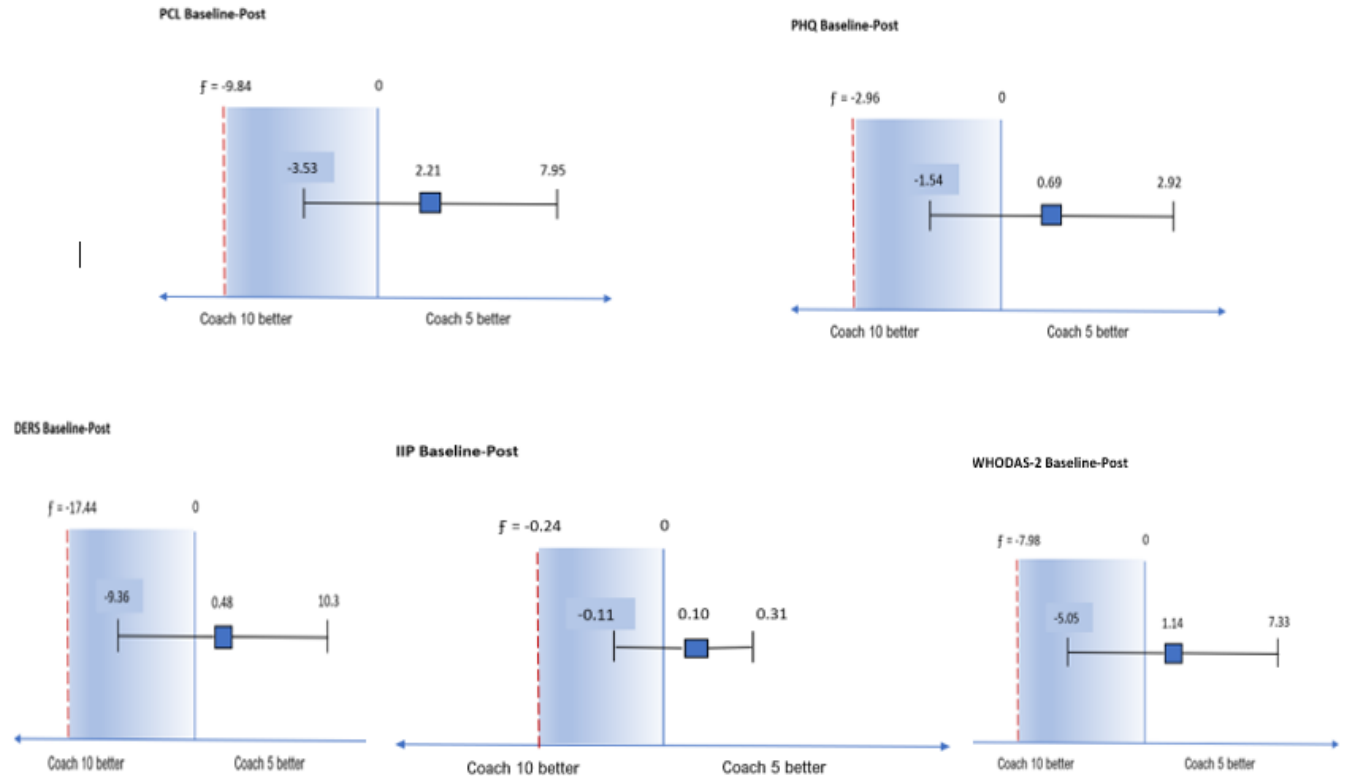
**Results:** Intent-to-treat analyses revealed significant symptom reduction for all outcomes, with large to moderate effect sizes at 3-month follow-up. Outcomes did not

Fletcher, T. L., Amspoker, A. B., Wassef, M., Hogan, J. B., Helm, A., Jackson, C., Jacobs, A., Shammet, R., Lindsay, J. A., & Cloitre, M. (2021). Increasing access to care for trauma-exposed rural veterans: A mixed methods outcome evaluation of a web-based skills training program with telehealth-delivered coaching. *The Journal of Rural Health*.

# Does “Dose” of Coaching Matter?

Comparing the Ratio of Therapist Support to Internet Sessions in a Blended Therapy Delivered to Trauma-Exposed Veterans

Figure 2a-e. Non-Inferiority Margins and 95% Confidence Intervals for Differences in Outcomes (from Baseline to Post) between Coach 5 and Coach 10



Cloitre, M., Amspoker, A. B., Wassef, M., Hogan Fletcher, T. L., ... & Lindsay, J. A. (2021). Comparing the Ratio of Therapist Support to Internet Sessions in a Blended Therapy Delivered to Trauma-Exposed Veterans. *Journal of Medical Internet Research*.

# Veteran Voices: Coaching Matters

“It’s nice to have that guidepost [coach] to help with processing, get encouragement, and feedback.”

“I liked being able to go through the modules on my own and digest and then go to the coach and see if that was intended.”

“I appreciate the materials, but if the coaching sessions were not there, I probably wouldn’t have finished the program. It added the depth.”

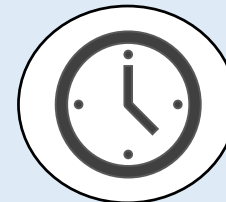
# Participant Experiences with the Modality & Coaching



Coaching Provides Accountability and Support



Self-Pacing Offers Value that Meets Individual Needs



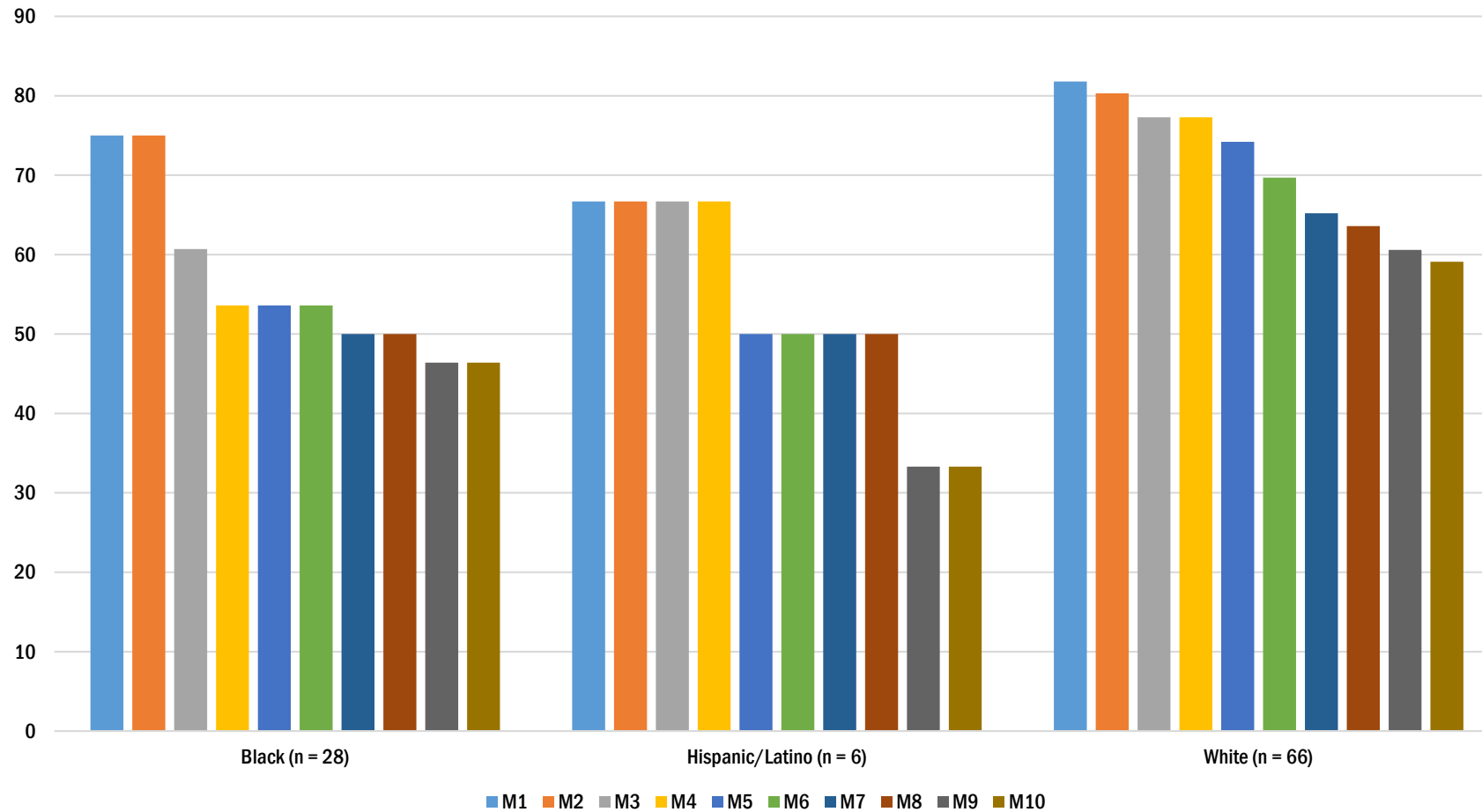
Participants Like the Comfort and Convenience



Technical Issues are Common but not Insurmountable



# Percent Module Completion among Women by Race





Content that reflects perspectives from diverse backgrounds



Videos and role plays that reflect real-world scenarios



Content that can be customized by the patient



Input from patients on the content incorporated in to the Tool

Potential Solutions



THE **TeleBehavioral Health Summit**

# Special Thanks

## Implementation

Stephanie Day, PhD  
Julianna Hogan, PhD  
Miryam Wassef, LCSW  
Giselle Day, MPH  
Kathy Marchant Miros, RN  
Paula Wagener, BA

## Quantitative/Methods

Amy Amspoker, PhD  
Annette Walder, MS

## Qualitative

Patricia Chen, PhD  
Ashley Helm, MA  
Hilary Touchett, PhD  
Alexandra Caloudas, PhD  
Armandina Garza, BA

## Education/Training

Anthony Ecker, PhD  
Jennifer Bryan, PhD

## Contact info:

Jan A. Lindsay, PhD  
Jan.Lindsay2@va.gov



@janlindsayphd



**U.S. Department of Veterans Affairs**

Veterans Health Administration  
Office of Rural Health

