

Telehealth Delivery of Yoga for Wellness Groups

Findings from a Multi-site TeleYoga Program Evaluation

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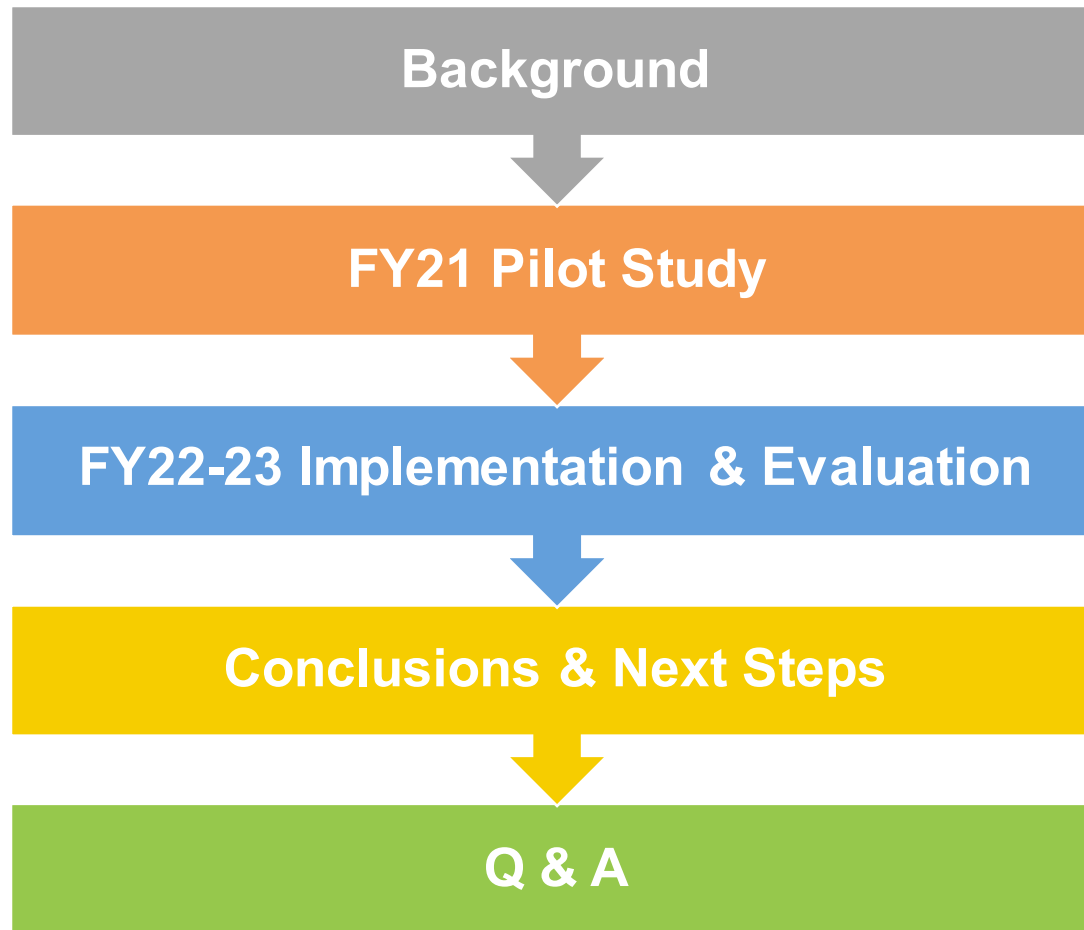
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DISCLOSURES

This material is based upon work supported by the Department of Veterans Affairs, Veterans Health Administration, Office of Rural Health, Veterans Rural Health Resource Center-Iowa City (Award #016016) (PI: Nicosia)

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OVERVIEW



Poll Question #1

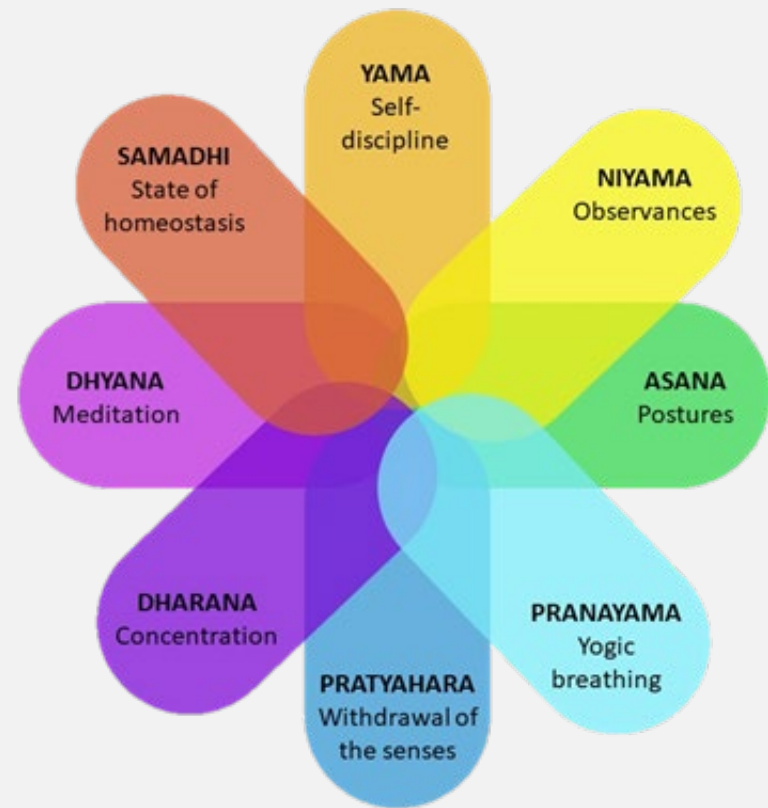
What is Your Role?

(select all that apply)

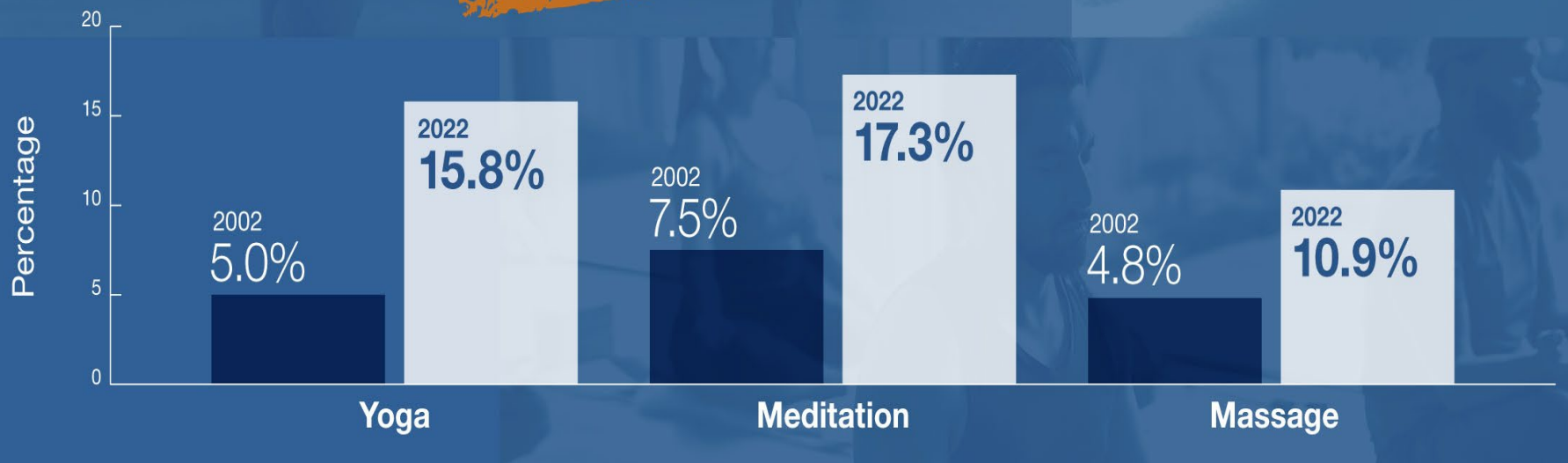
- A. Clinician
- B. Researcher
- C. CIH Practitioner
- D. Other (write in Q&A)

WHAT IS YOGA?

- Holistic system to support wellbeing and reduce suffering
- Mind-body movement modality
- Growing evidence base for yoga for conditions prevalent among Veterans



Use of Yoga, Meditation, and Massage: *20-Year Trends*



Yoga is more common among:

- Women
- Higher SES
- ≤65 years
- Non-Hispanic White adults

Clarke NCHS Data Brief 2018
Nahin JAMA 2024

Poll Question #2

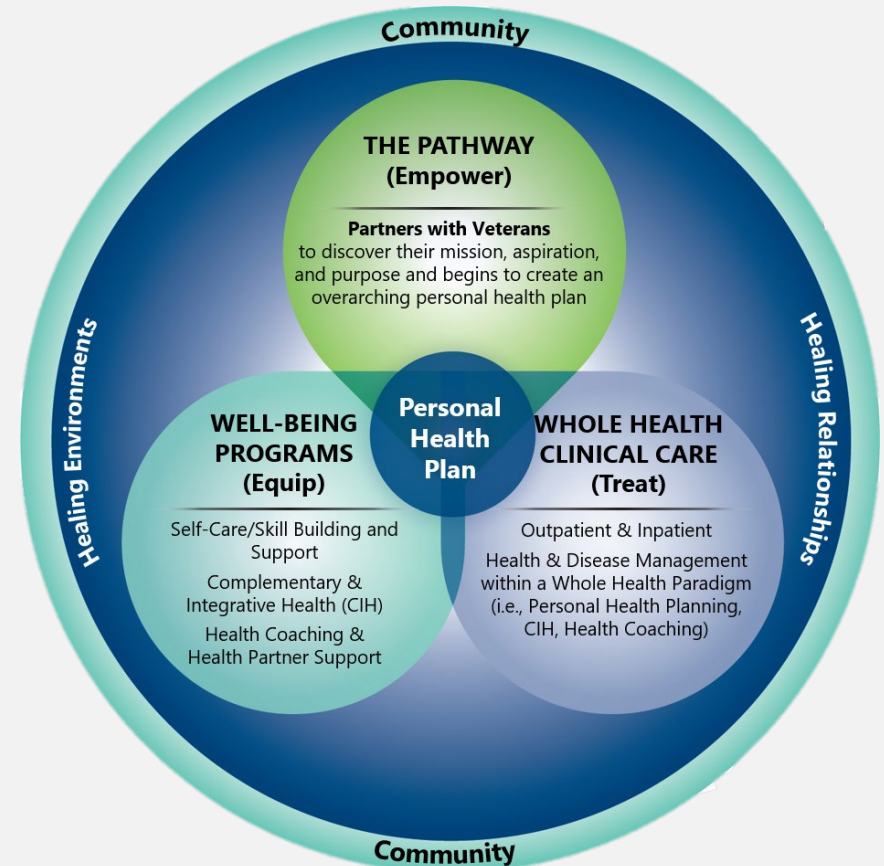
What is your experience with yoga?

(Please select what describes you best)

- A. Never tried yoga
- B. Have tried yoga
- C. Regular yoga practice
- D. Certified Yoga Teacher
- E. Certified Yoga Therapist

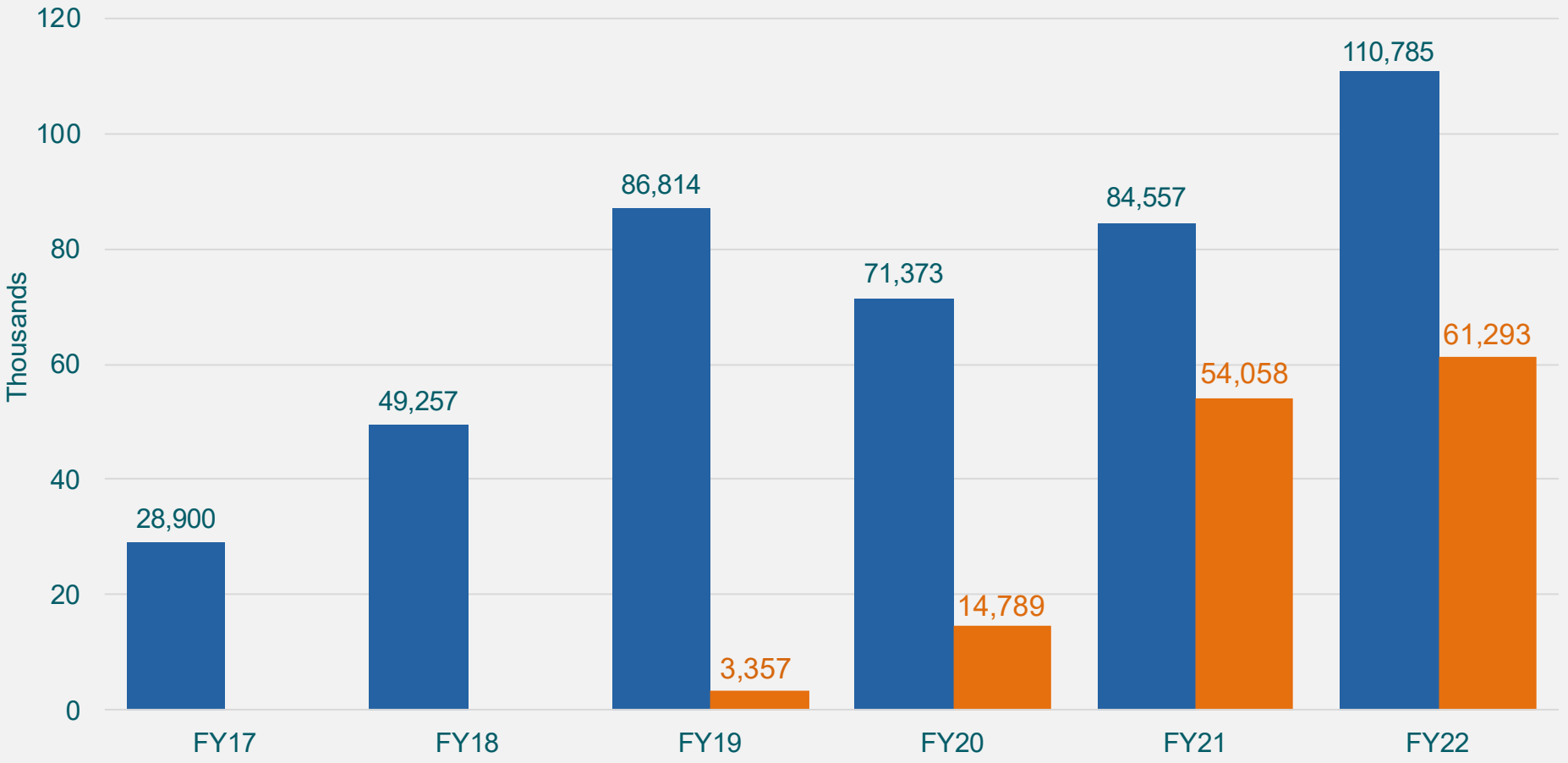
YOGA IN THE VA

- 2014: Evidence Synthesis
- 2017: CIH Directive 1137
- Whole Health System Transformation



Coeytaux VA Evidence-based Synthesis Program Reports 2014; Taylor JGIM 2019; Whitehead Med Care 2020; Whitehead GAIMH 2024; VA Directive 1137: Provision of Complementary and Integrative Health 2017

Yoga Encounters FY17-22 | Tele-Yoga Encounters FY19-22



Data from VA Administrative Database (Corporate Data Warehouse)

FY21 – SFVAHCS Pilot



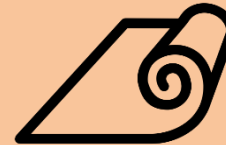
**EMR-based
Referral**



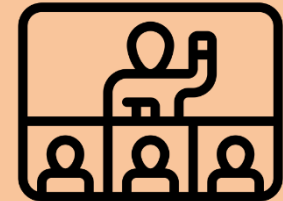
Intake Call



Orientation



Yoga Props



**Tele-Yoga
Groups**

1208 Encounters with 70 Veterans

5 Yoga Instructors

- Nurse Practitioner
- Peer Support Specialist
- Social Worker
- Registered Dietician
- Yoga Therapist

4-6 Yoga Groups/Week

- Gentle and Active Yoga
- iRest Yoga Nidra
- Yoga for Women
- Spinal Health

Pham, *GAIMH*, under review

PROGRAM GOAL

Increase access to CIH among underserved and rural Veterans by implementing video-based, livestream yoga (tele-yoga)



TELEYOGA PROGRAM ROLES



External Facilitators



Evaluation Team



Clinical Champions



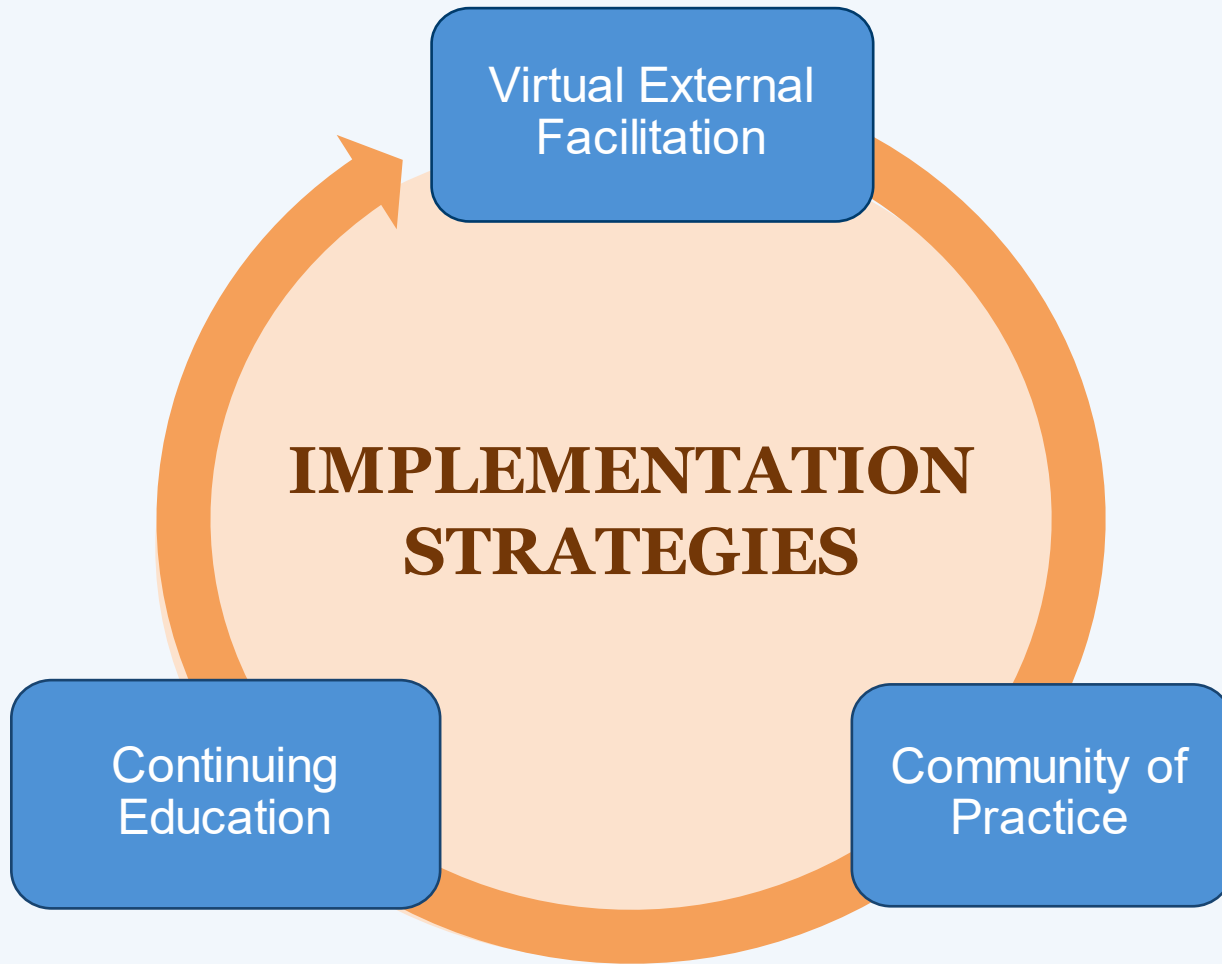
Admin & Tech Support
Local Program Support



Yoga Instructors



Veterans

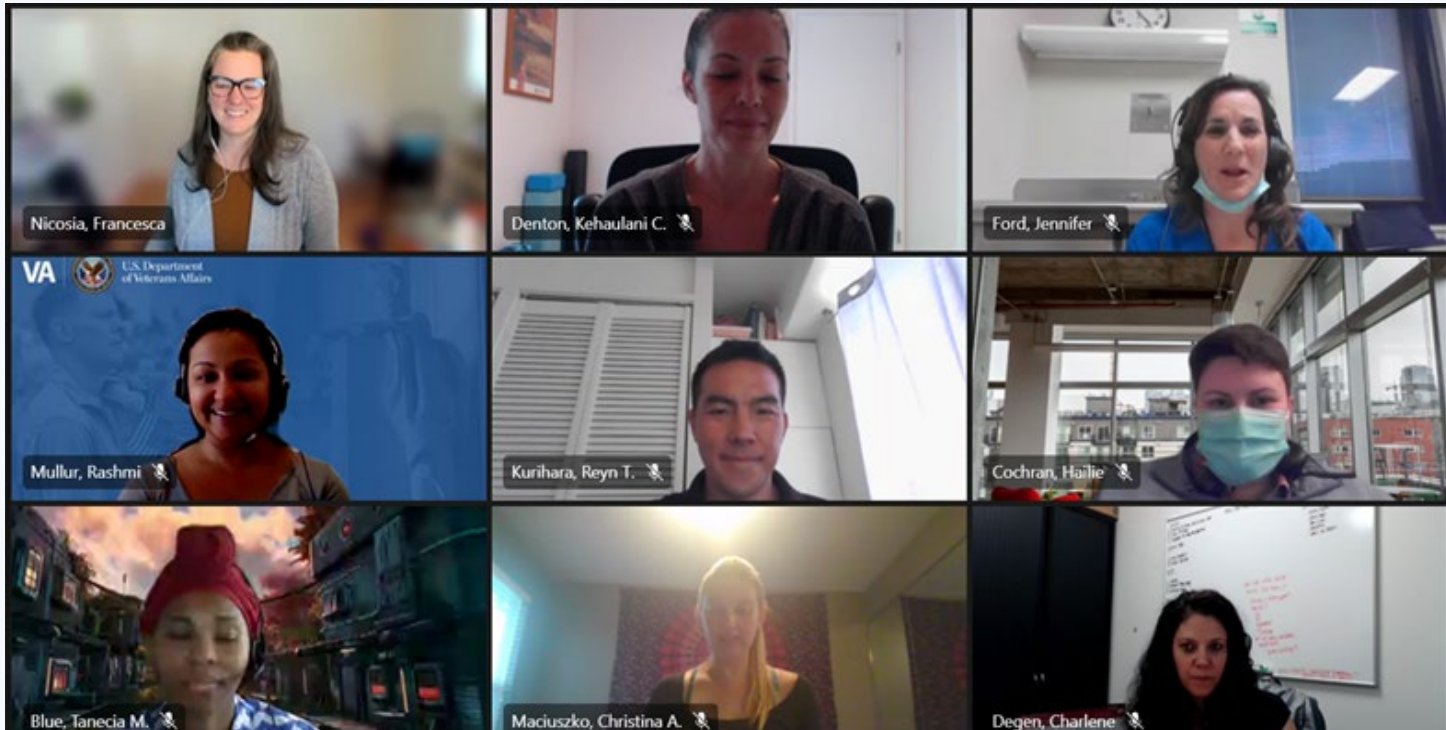


VIRTUAL EXTERNAL FACILITATION

Monthly Site Meetings

- Identify and prioritize barriers facing underserved Veterans
- Navigate clinical, logistical, and technical challenges
- Develop rural outreach strategies

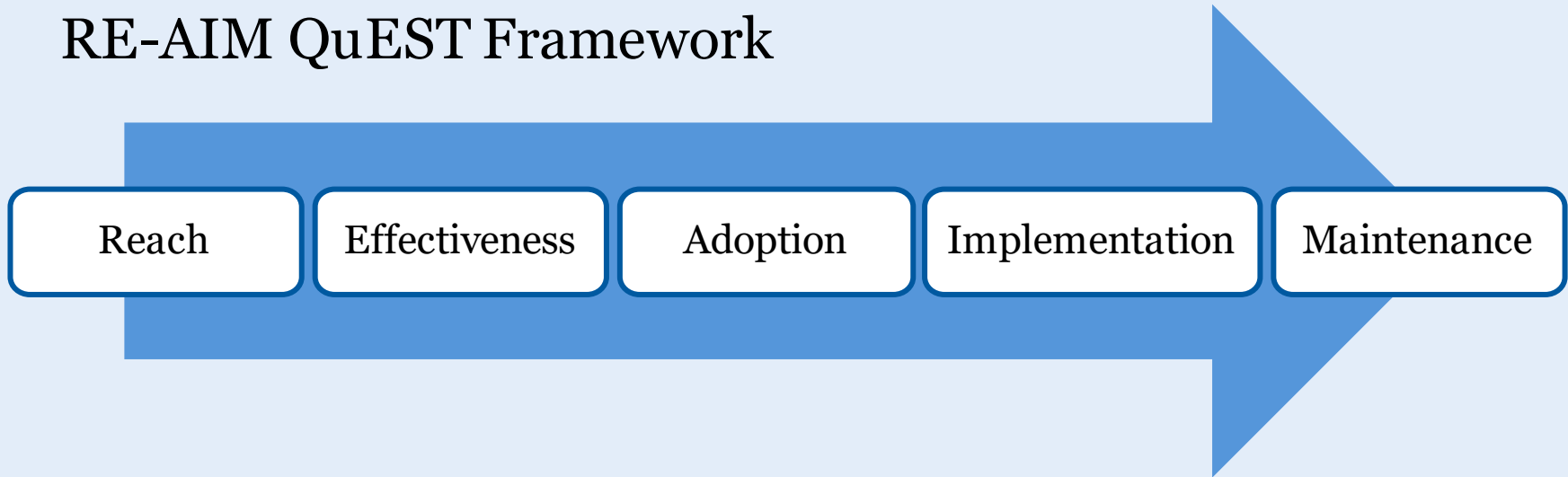
COMMUNITY OF PRACTICE



- Connect program sites & tele-yoga instructors
- Discuss implementation barriers & disseminate best practices
- Provide continuing education & training opportunities

METHODOLOGY

RE-AIM QuEST Framework



Health Equity Implementation Framework



Forman *Prev Med Rep* 2017
Woodward *Imp Sci* 2019

DATA COLLECTION

VA Administrative Data (CDW)

- Patient characteristics & tele-yoga encounters
- RUCA codes were used to determine rurality

Structured Questionnaire (VA Qualtrics)

Distributed to all program participants during FY22-23

2+ Encounter Survey (N = 166)

- Program satisfaction
- Accessibility
- Perceived effectiveness

1 Encounter Survey (N = 41)

- Reasons for drop-out

DATA COLLECTION

Virtual Ethnographic Observations

35 Virtual External Facilitation (VEF) meetings observed

- Identify implementation barriers and facilitators
- Effectiveness of facilitation
- Strategies for centering health equity across RE-AIM domains

DATA COLLECTION

Semi-Structured Interviews

Yoga Instructors (N=13)

Early implementation

- Yoga background
- Implementation
- Program delivery
- Health equity considerations

Veterans (N =46)

Mid Implementation

- Health background
- Prior Yoga experience
- Program accessibility
- Perceived effectiveness
- Program improvement

Clinical Champions (N=6)

Late implementation

- Implementation barriers & facilitators
- External facilitation feedback
- Sustainment plans

DATA ANALYSIS

VA Administrative & Qualtrics Data

- Descriptive statistics
- Group comparisons
 - Chi-Squared & Wilcoxon Tests

Interviews & VEF Observation Notes

- Rapid qualitative analysis
- Hybrid deductive & inductive thematic analysis

TELEYOGA REACH

1091 Veterans | 11345 Encounters

Mean Encounters: 10.3

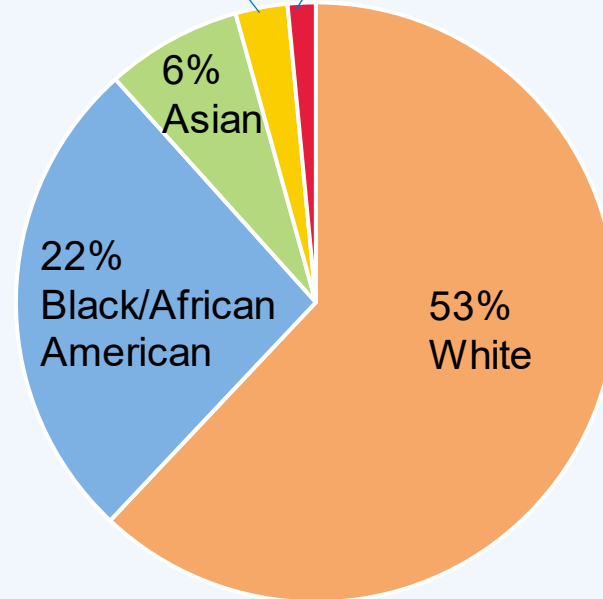
Mean Age: 57.1 ± 14.5

40% Women Veterans

21% Rural-dwelling

9% Hispanic or Latino

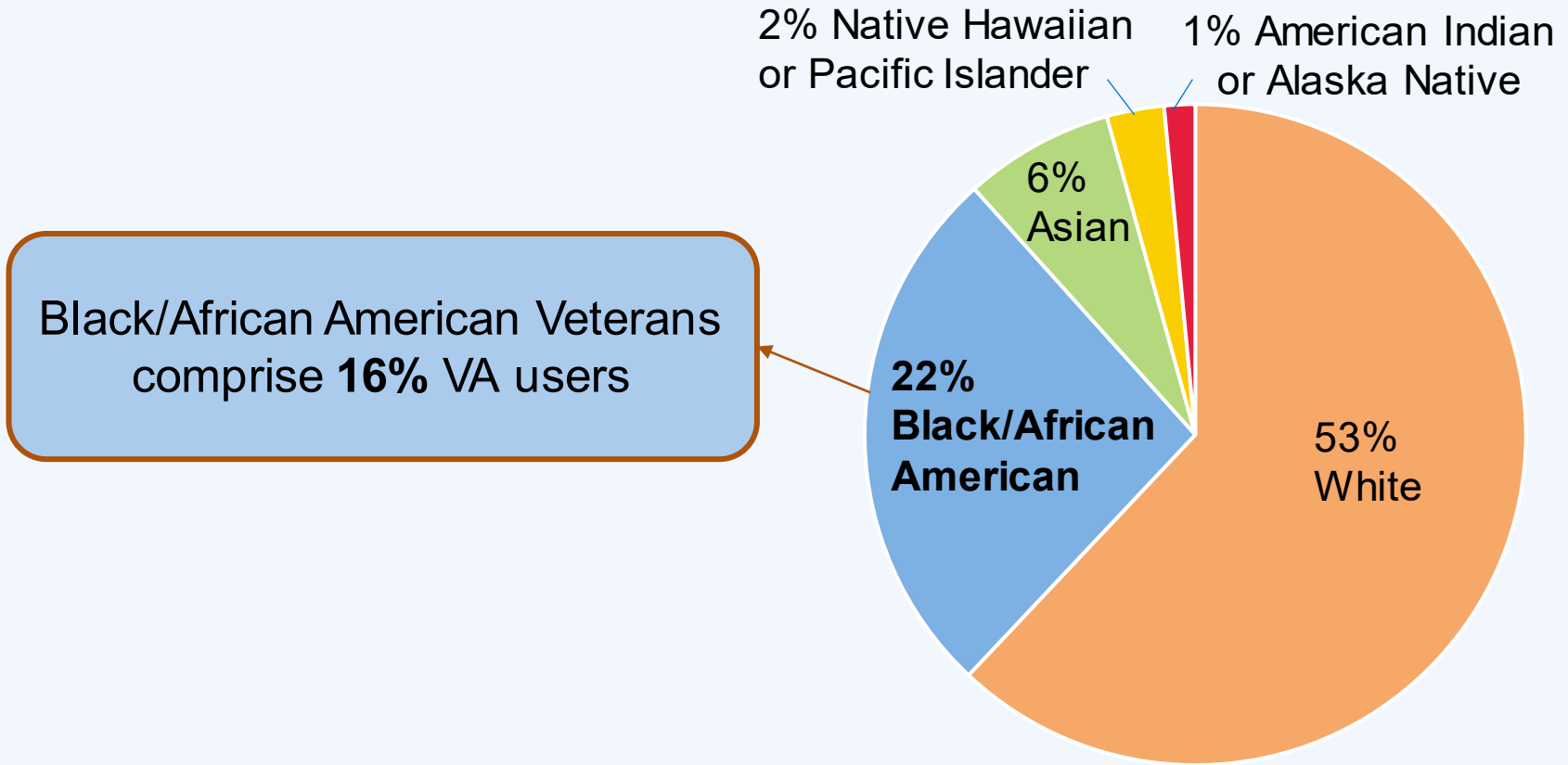
2% Native Hawaiian or Pacific Islander
1% American Indian or Alaska Native



*VA Administrative Data

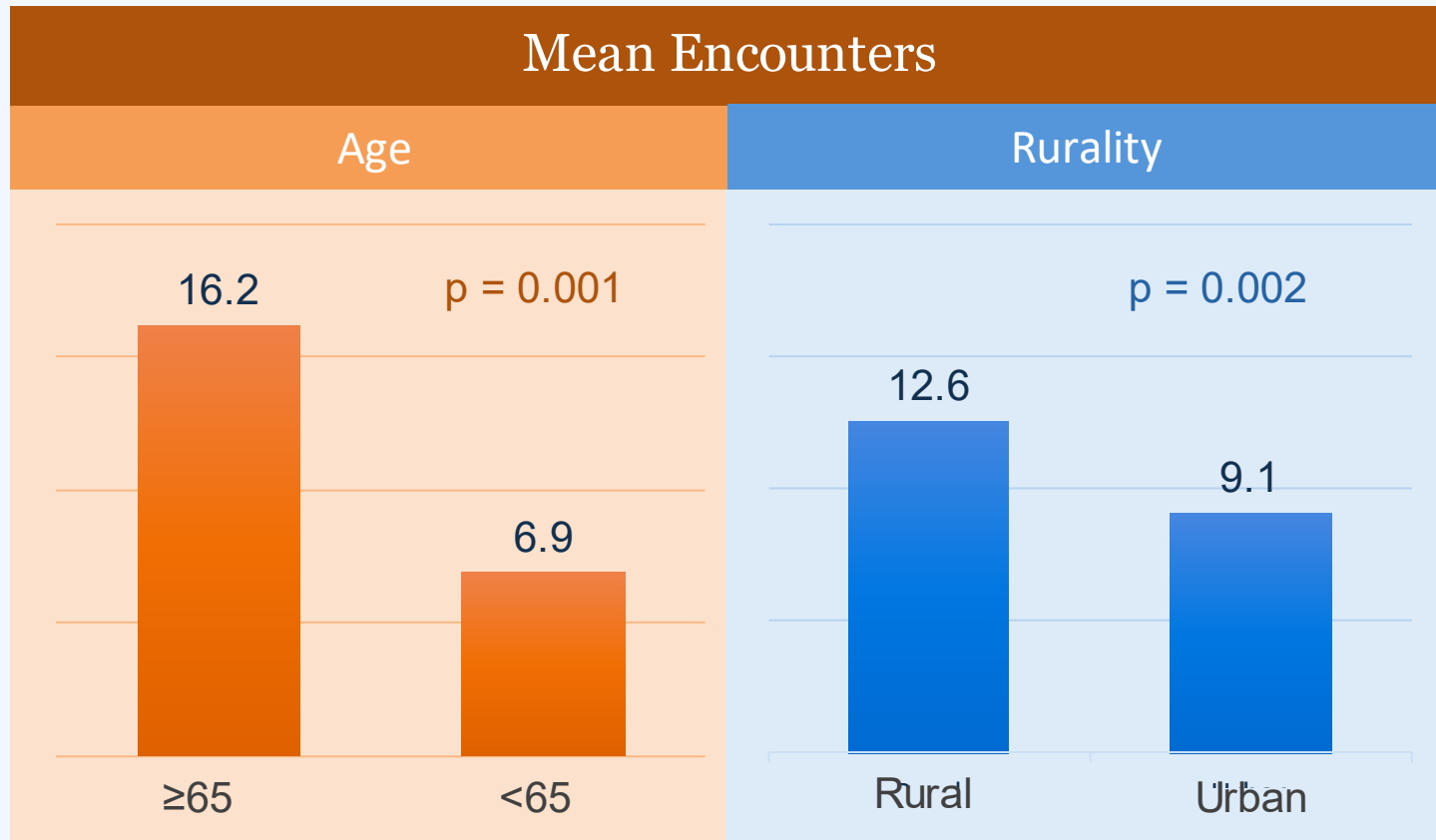
TELEYOGA REACH

1091 Veterans | 11345 Encounters



*VA Administrative Data
Washington NVHER 2023

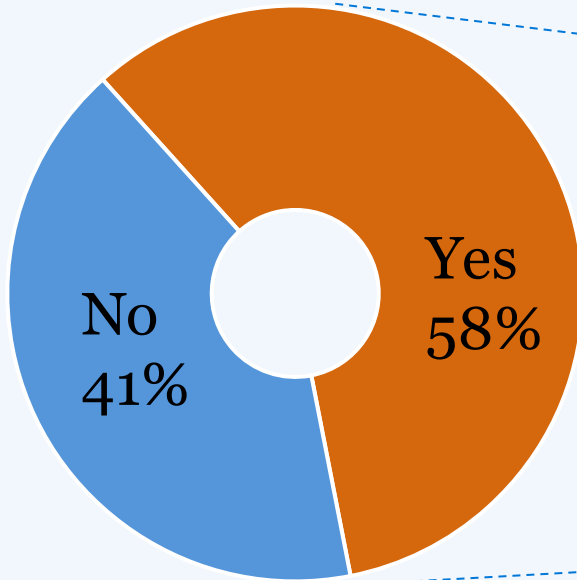
Older & rural Veterans had significantly higher encounters and were less likely to discontinue TeleYoga after one encounter ($p < 0.01$)



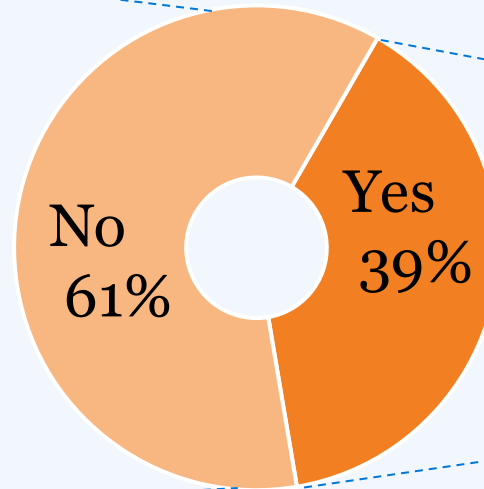
*VA Administrative Data

VETERANS' YOGA EXPERIENCE

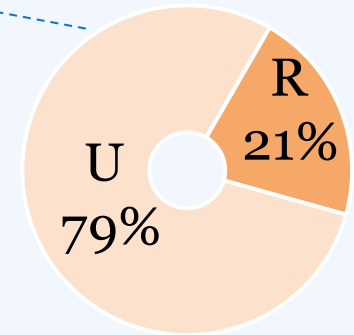
Prior Yoga Experience



In-Person VA Yoga



Rurality



Most participants were engaging with Yoga outside of a VA setting before starting tele-yoga.

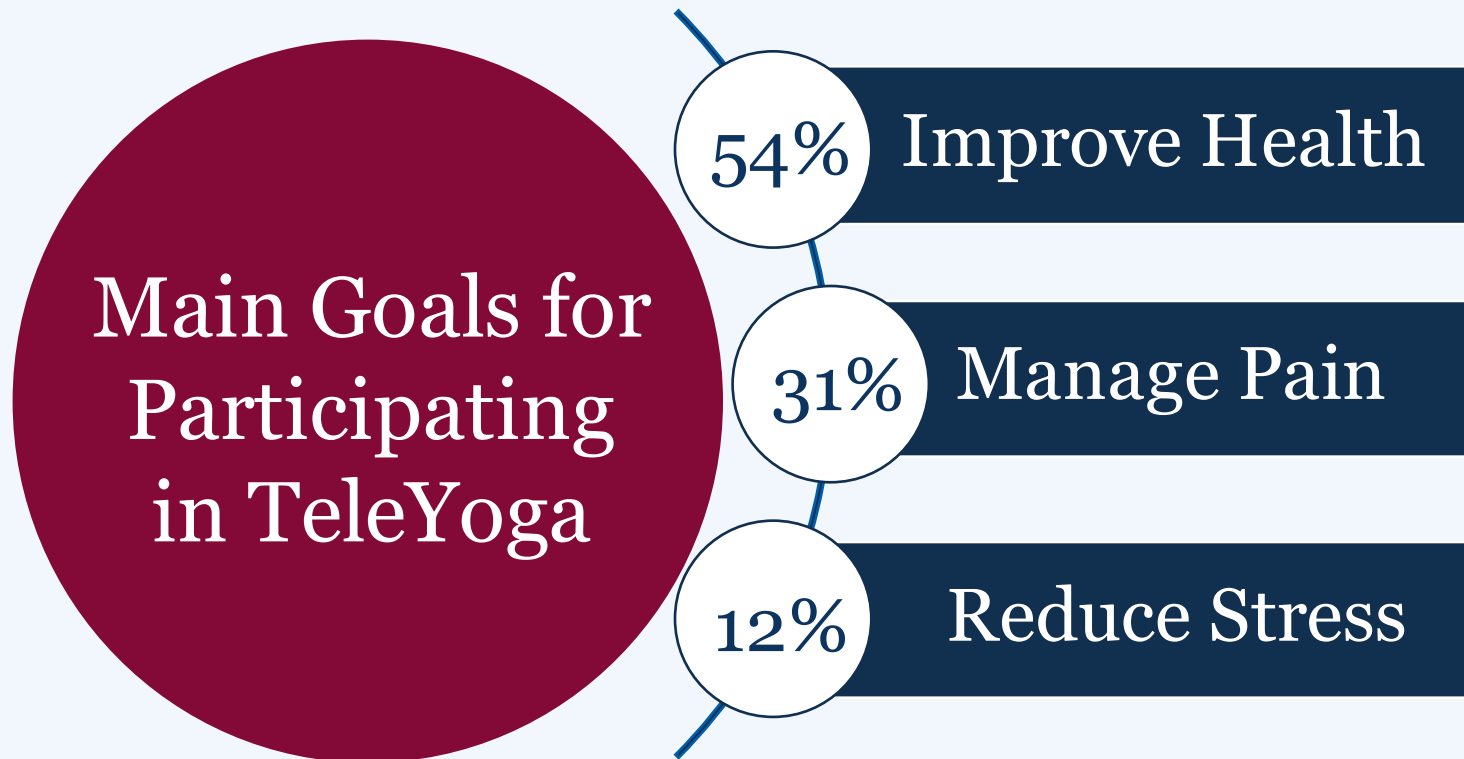
*Qualtrics Survey Data

VETERANS' YOGA EXPERIENCE

“Before I started this yoga class with the VA, I never took yoga. I always thought yoga was something that ... didn't do anything really. What good is it? What does it do for you? But I've found out that it really does a lot for you. . . . for your body ... for your headspace.”

-Male Veteran, age 66, Site 1

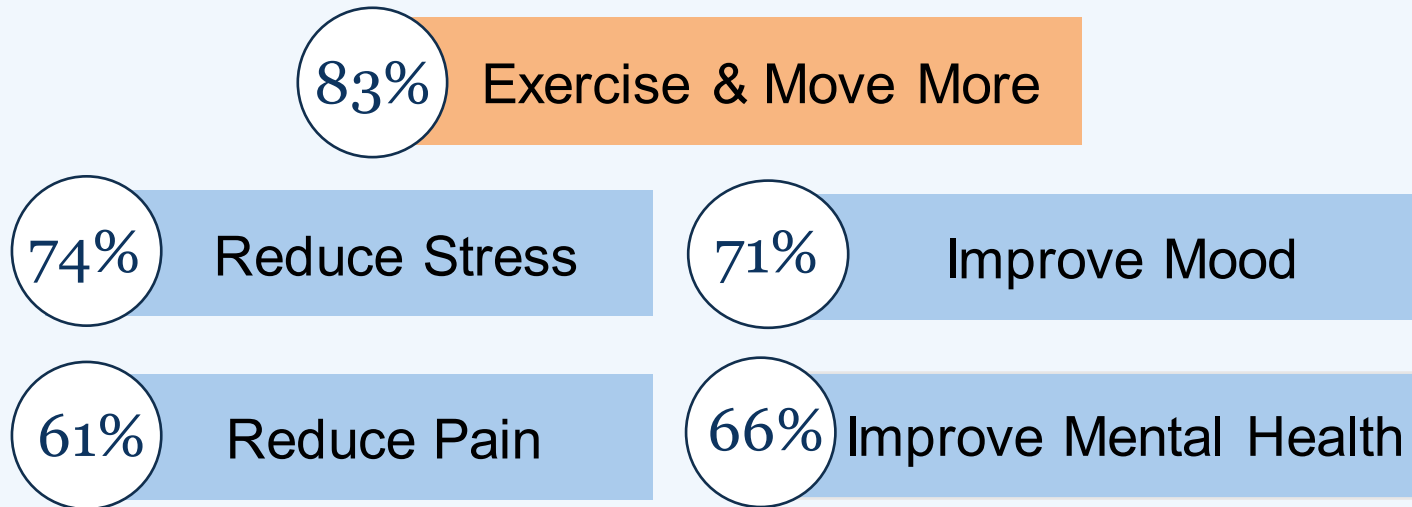
*Interview Data



*Qualtrics Survey Data

PERCEIVED EFFECTIVENESS

Survey participants agreed that taking TeleYoga helped them...



“Once I started, I was walking taller, able to use breathing to calm my panics, & became stronger. It also helps me with chronic back pain.”

*Qualtrics Survey Data

PATIENT-REPORTED EFFECTIVENESS

Moving the Body & Pain Management

“Yoga helps me when it comes to dealing with my pain issues and before I started doing the yoga, I wasn't getting the stretching that I needed, the exercise that I needed. I felt everything was hurting a lot. I still deal with pain, BUT the difference is that I have methods to deal with some of my pain.

The yoga helps me to handle it better... And that helps me a LOT. Also, the meditation helps. So, yoga helps me in a lot of ways, and since I've been taking it, I've been better off.

I take Percocet for my pain and I used to take a lot of different medicines and now, I don't take it as often. I find other ways to deal with my pain.”

- Male Veteran, Site 1, Age 66

*Interview Data

PATIENT-REPORTED EFFECTIVENESS

Mood & Mental Health

“Getting in my vehicle by myself, I'm OK probably 75% of the time, but being in a vehicle where I have no control and somebody else is driving really freaks me out, it makes me go into fight or flight. But I'm doing better, and I'm even practicing mindfulness when I'm driving now and trying to stay focused. **It's not just taking a yoga class, It's a whole mind, body, spiritual, emotional check and balance.**”

- Female Veteran, Age 47

*Interview Data

PATIENT-REPORTED EFFECTIVENESS

Program participants agreed that taking TeleYoga helped them...

78% Engage in Their Personal Healthcare

“Exercising me AND my **commitment to better overall health!**”

“I have lost weight for it has **motivated me to exercise.**
My overall health has improved tremendously.”

“**I'm excited to improve my health** while attending classes.”

*Qualtrics Survey Data

IMPLEMENTATION FACTORS

- Participant Experience
- Technology & AV Quality
- Site Characteristics
- Barriers & Facilitators
- External Facilitation Feedback

PARTICIPANT SATISFACTION

94%

Would recommend TeleYoga to other Veterans

94%

Rated the overall quality of TeleYoga classes as good to excellent

93%

Rated their overall experience with TeleYoga as good to excellent

91%

Rated the extent to which TeleYoga met their needs as good to excellent

*Qualtrics Survey Data

PARTICIPANT EXPERIENCE

Accessibility

89%

Rated the convenience of TeleYoga as good to excellent

68%

Reported that the online format made it “a great deal easier” to attend than an in-person VA Yoga class

"As I live far away from any VA facility, the convenience is fabulous. I don't think I would have ever done yoga if VA hadn't offered it online."

"You don't have to feel uncomfortable if you don't do the positions right. You don't have to be self conscious about your body."

*Qualtrics Survey Data

PARTICIPANT EXPERIENCE

"I really like the teleyoga . . . I've not found anything else that would meet that need, any community based or whatever. **I wouldn't be able to afford to do a private, Planet Fitness or something, that's not in my budget.** If there's a professional out there doing it, it's gonna cost money, and I don't have the budget for that... Where I live, it's a 30-minute drive in any direction to get to anything...so a yoga class would be a multi hour event. **If the VA stopped offering the classes online, then I would end up stopping.**"

- *Rural Male Veteran, Site 5*

*Interview Data

PARTICIPANT EXPERIENCE

Social Connection

83%

Rated their sense of personal connection with the TeleYoga instructor as good to excellent

63%

Rated their sense of personal connection with the other TeleYoga participants as good to excellent

"For the most part, it is **the only connection that I have with the VA**. Honestly, my yoga instructor is the only VA person that seems to give a s**t about me."

"The Yoga and interaction with the instructor **makes me feel like I have purpose.**"

*Qualtrics Survey Data

PARTICIPANT EXPERIENCE

Social Connection

"I would go to the gym and even though there's people around me, I'm really working out by myself because I don't know any of these people, but then **you get to do virtual, I know familiar faces. I miss the people who I take the virtual [yoga] with. That gives me the connection... I think it's connectedness to your physical health and well-being.** It really is [good] to have the yoga and you don't feel lonely. Sometimes you get caught up in your own home and you don't have nobody else, and that kind of connection with others. **Even though it's virtual, it's still a connection.**"

- Female Veteran, Site 5

*Interview Data

TECHNOLOGY & A/V QUALITY

87%

Rated their ability to see the instructor during class as good to excellent

85%

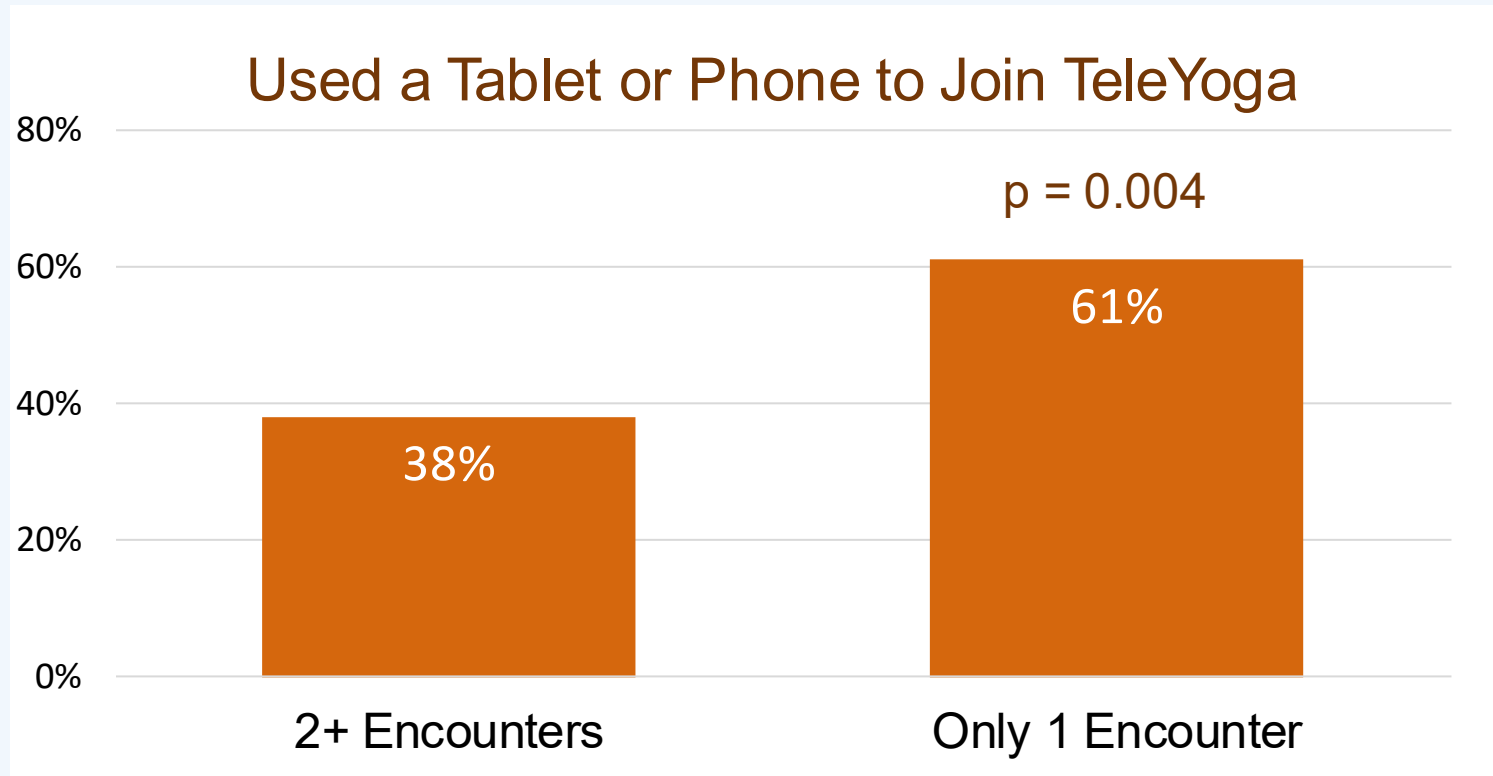
Rated the sound quality as good to excellent

80%

Rated the instructors' ability to see them during class as good to excellent

*Qualtrics Survey Data

TECHNOLOGY & A/V QUALITY



Survey responders that discontinued TeleYoga after one encounter were significantly more likely to have used a tablet or smaller device.

*Qualtrics Survey Data

TELEYOGA SITE CHARACTERISTICS

	TeleYoga Before FY22	Service Line	TeleYoga Platform
Site 1	Yes	Integrative Health / Primary Care	WC, CVT, Hybrid
Site 2	Yes	PMNR → Whole Health	WC
Site 3	No	Rec Therapy / Whole Health	WC
Site 4	*No	Whole Health	WebEx
Site 5	No	Physical Therapy / Whole Health	WC, Hybrid
Site 6	Yes	Rec Therapy & Whole Health	WC, Zoom
Site 7	Yes	Integrative Health / Whole Health	WebEx

*No in-person yoga prior to implementing tele-yoga

TELEYOGA SITE CHARACTERISTICS

	Yoga Instructors	Admin Support Staff	Yoga Props
Site 1	7/8 th Instructor	No	Yes – in person pick up only
Site 2	Contract & 8/8 th Instructors	PSA & MSA	No
Site 3	Labor mapped VA staff & 8/8 th Instructor	No	Yes
Site 4	Contract & labor mapped VA staff	PSA & MSA	Yes
Site 5	Labor mapped VA staff	No	Yes – in person pick up only
Site 6	Labor mapped VA staff, volunteer yoga instructor	No	Yes
Site 7	Labor mapped VA staff	Research Coordinator	Yes

SYSTEM (NATIONAL) LEVEL

Barriers

- VA Video Connect
 - Platform failures
 - Mismatch in design and tele-yoga group needs

Facilitators

- Expansion of telehealth options during pandemic public health emergency (e.g., WebEx)
- VA's Digital Divide program
- Support and resources for TeleWholeHealth

FACILITY LEVEL

Barriers

- Leadership support
- Staffing and hiring
- Challenge providing classes outside business hours to accommodate Veterans' schedules
- Difficult logistics for sending yoga prop kits to Veterans
- Minimal administrative or scheduling support

Facilitators

- Leadership support
- VA staff with yoga certification
- Access to high quality AV equipment for instructors
- Clear referral pathway
- Strong partnerships with primary care and mental health
- Access to adequate physical space

FACILITY SPACE CONSIDERATIONS

Barriers

- Physical space is limited at VA facility
- Small space can make it difficult for yoga teacher to fit full body on screen
- Large monitor for viewing groups requires space
- Shared office space lacks privacy
- Moving through a healthcare facility with equipment requires time and preparation

"It's like a full-on VA industrial office. It's not the most inviting setting, you know? . . . I start off the day mopping the floors in here because I know I'm gonna put my mats down on it, you know . . . Space is such an issue. Part of the reason I'm [teaching some classes from] home is because we just, we don't have the space to accommodate all the staff."

- Yoga Teacher #9

PARTICIPANT REASONS FOR DROP-OUT

Schedule Conflict
52%

“Please offer for after work hours after 4pm”

Loss of Contact
25%

“I never got another notification of the next class”

Internet/Device Issue
14%

“The class was fun the one time I tried it, but at the time I didn't have the iPad that the VA provided me, and the connection froze.”

Yoga Isn't for Me
10%

“Just don't like group classes”

*Qualtrics Survey Data

PARTICIPANT SUGGESTIONS FOR IMPROVEMENT



More Class Offerings



Program Support



A/V Quality & Internet

*Qualtrics Survey Data

SUMMARY

- TeleYoga provides accessible and affordable option for Veterans
- High TeleYoga engagement among rural & older Veterans
- High rates of participation among African American & women Veterans
- Positive impact on patient health & well-being
- TeleYoga participation increased healthcare engagement
- TeleYoga provided meaningful opportunity for social connection
- Veterans using smaller devices more likely to discontinue

SUMMARY

- Varied models for TeleYoga programs
- Hiring / labor mapping challenges persist
- Delivery of TeleYoga programs requires adequate physical space
- Program support staff needed at the facility level for administrative and scheduling needs
- Continued investment in VA yoga instructor workforce development may increase potential for spread and sustainment of tele-yoga programs

LIMITATIONS

- Survey
 - Response rate (30% for 2+ encounter veterans)
 - Retrospective self-report of perceived effectiveness
 - Inconsistent timing for data capture
 - Potential response bias
 - No objective measures for health outcomes

FUTURE DIRECTIONS

Newly Funded Studies:

- Adaptation of a Mind-Body Movement Program for rural Veterans with dementia & care partners for telehealth delivery (ORH, PI: Nicosia)
- Development of a virtual Mind-Body Menopause Program (ORH, PI: Nicosia)

Open to research collaborations!

- Comparative effectiveness of tele-and in-person yoga
- Wearables & remotely collected outcomes data
- Environmental scan of local programs and VA yoga workforce

OPCC&CT / IHCC initiatives:

- National VA Yoga & Yoga Therapy COP
- National VA Yoga Teacher Training Program

THANK YOU



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The TeleYoga program and evaluation was funded by the Office of Rural Health (Award #016016)

TECHNOLOGY & A/V QUALITY

Camera use during TeleYoga

- 62% kept camera on all of the time
- 26% kept camera on some of the time
- 12% kept camera on none of the time
- Reasons for cam on none of the time:
 - 11% wanted to keep home environment private
 - 11% didn't want others to see them
 - 5% had a slow internet connection
 - 1% didn't have a camera

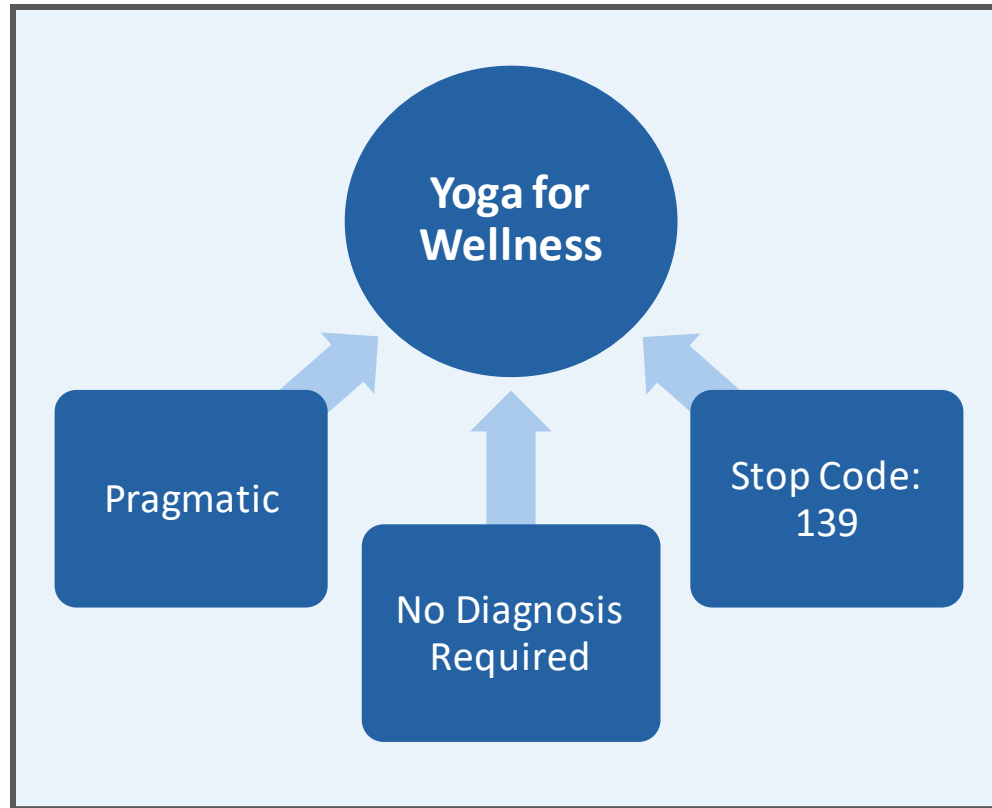
*Qualtrics Survey Data

TELEYOGA TEACHER INTERVIEW

Participant Characteristics

	Overall sample (n = 13)			
	n	%		
Site				
1	2	15		
2	1	8		
3	4	31		
4	3	23		
5	1	8		
6	2	15		
Gender				
Female	11	85		
Male	2	15		
Veteran status				
Veteran	2	15		
Non-Veteran	11	85		
VA role/position				
Social worker	1	8		
Dietician	1	8		
Recreational therapist	4	31		
Physical therapist	1	8		
Physical therapist assistant	3	23		
Wellness coach	2	15		
Contract yoga instructor	1	8		
			Years employed at VA	
			< 1 year	1 8
			1 – 2 years	2 15
			3 – 5 years	3 23
			> 5 years	7 54
			Years teaching yoga at VA	
			< 1 year	2 15
			1 – 2 years	1 8
			3 – 5 years	7 54
			> 5 years	3 23
			Level of yoga certification	
			200-hour	10 85
			500-hour	3 15
			Certified yoga therapist	3 15
			Type of yoga certification	
			Hatha	9 69
			Vinyasa flow	4 31
			Iyengar	1 8
			Bikram	1 8
			Yin	2 15
			iRest (Yoga Nidra)	2 15
			Warriors-at-ease	1 8
			Mindful yoga for Veterans	1 8
			Aqua yoga	1 8
			Received yoga teacher training at a VA yoga school	6 46

TELEYOGA GROUPS



Yoga for Wellness groups \neq Clinical Yoga Therapy or Research Protocols

EXTERNAL FACILITATION

- The variety of methods for communication – virtual meetings, emails, phone calls, and Teams chats – allowed CCs efficient ways to troubleshoot
- CCs also noted implementation milestones and dashboard as helpful tools for keeping track of progress

"I liked having the virtual meetings. I liked being able to just chat with [the facilitator]. I would always just say, I had this problem, can you help me?

And then she would always respond, or have the coordinators respond. So **I found it to be really helpful.**"

- Clinical Champion, Site 4

*Interview Data