Randomized Control Trial Results of a Remotely Delivered Complementary-Partnered Intervention to Improve Veteran Pain, PTSD related, and Relationship Outcomes

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Population Need

Project Aims and Methods

Project Findings

Recommendations for Future Research

Special Considerations

Discussion

Poll Questions

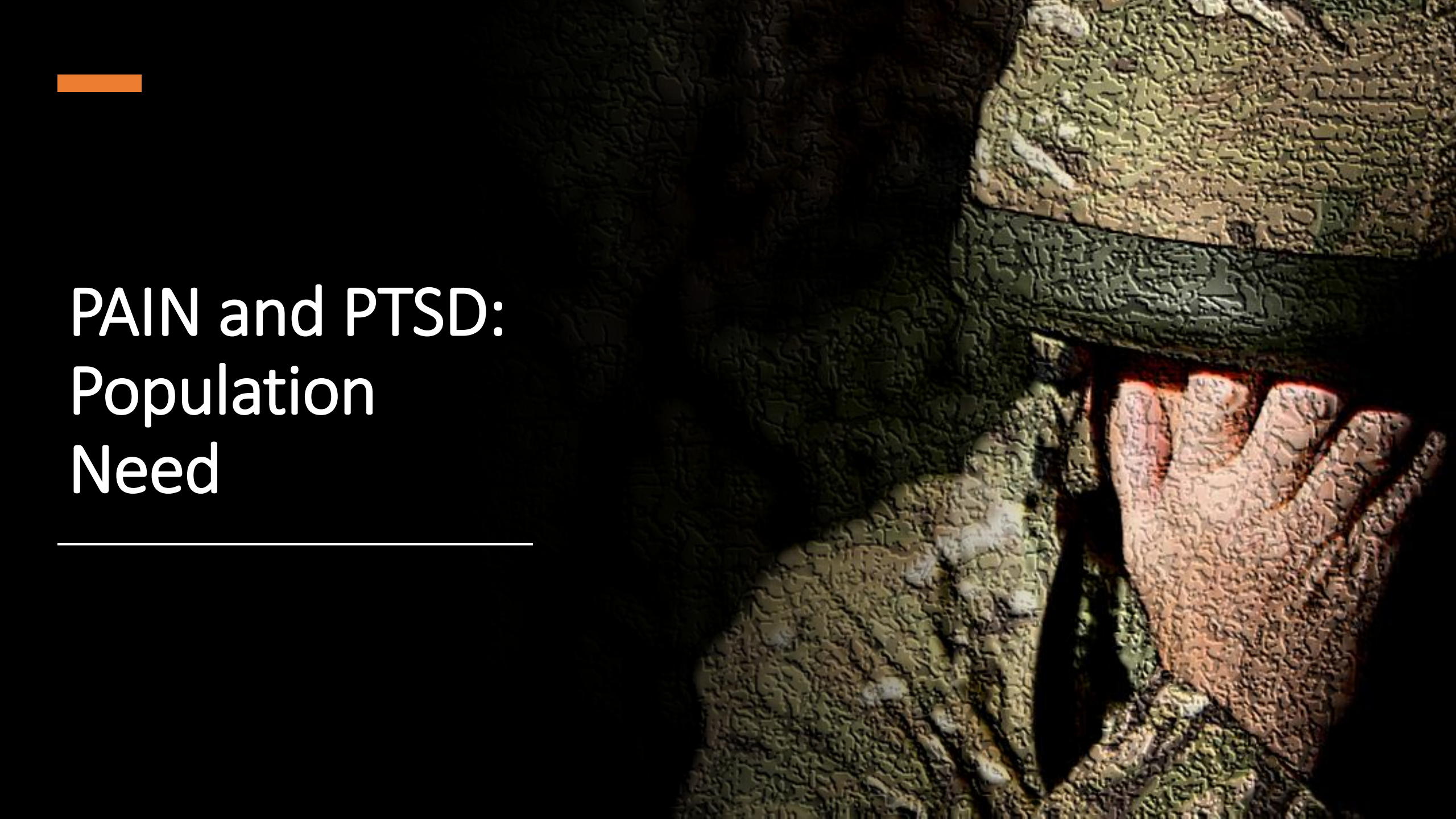
Who is joining us for today's session, by profession?

A. Mental Health Provider
B. Whole Health employee/CIH provider
C. Clinician
D. Administrator
E. Researcher
F. Other

Does your daily work routine involve delivery and/or research of whole health and/or CIH care for Veterans?

A. All the time
B. Sometimes
C. Never
D. Not yet, but I'm interested
E. Not applicable

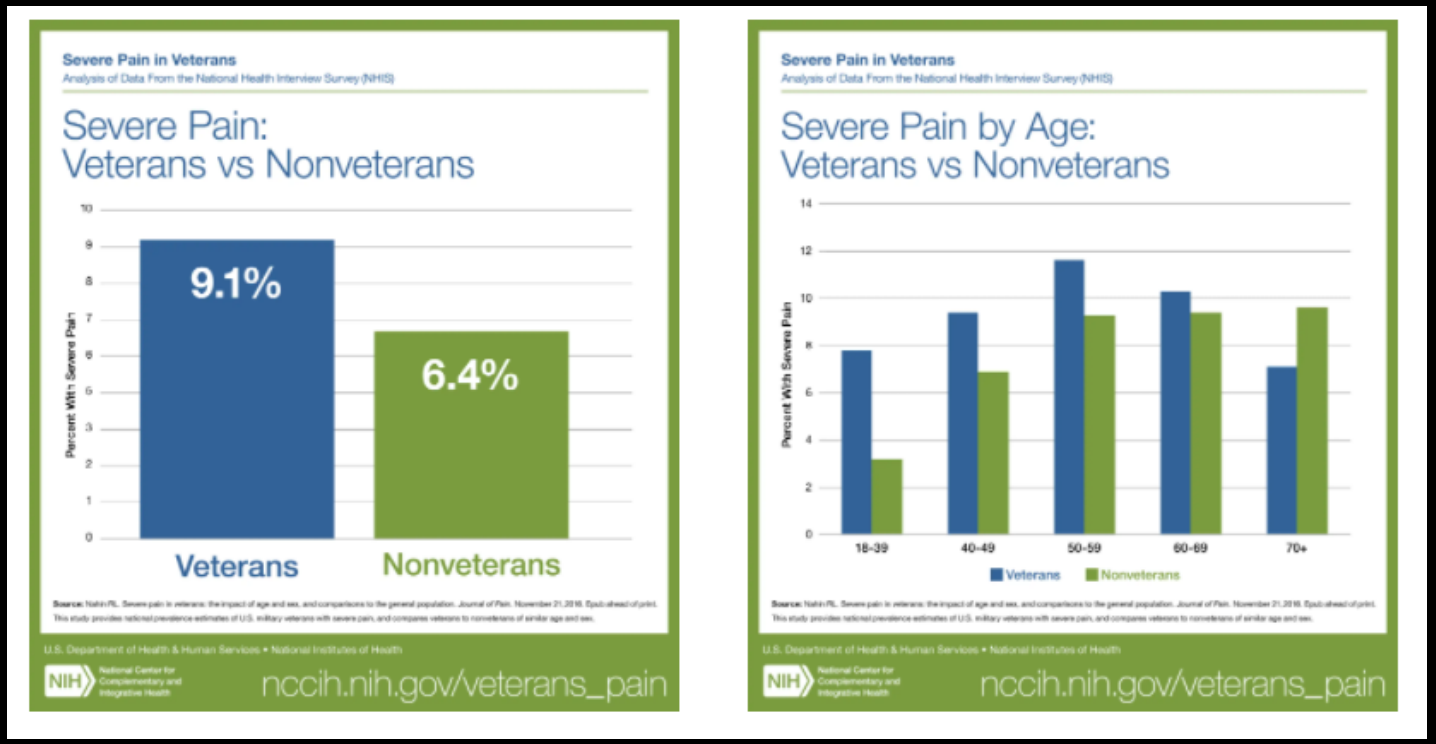
PAIN and PTSD: Population Need



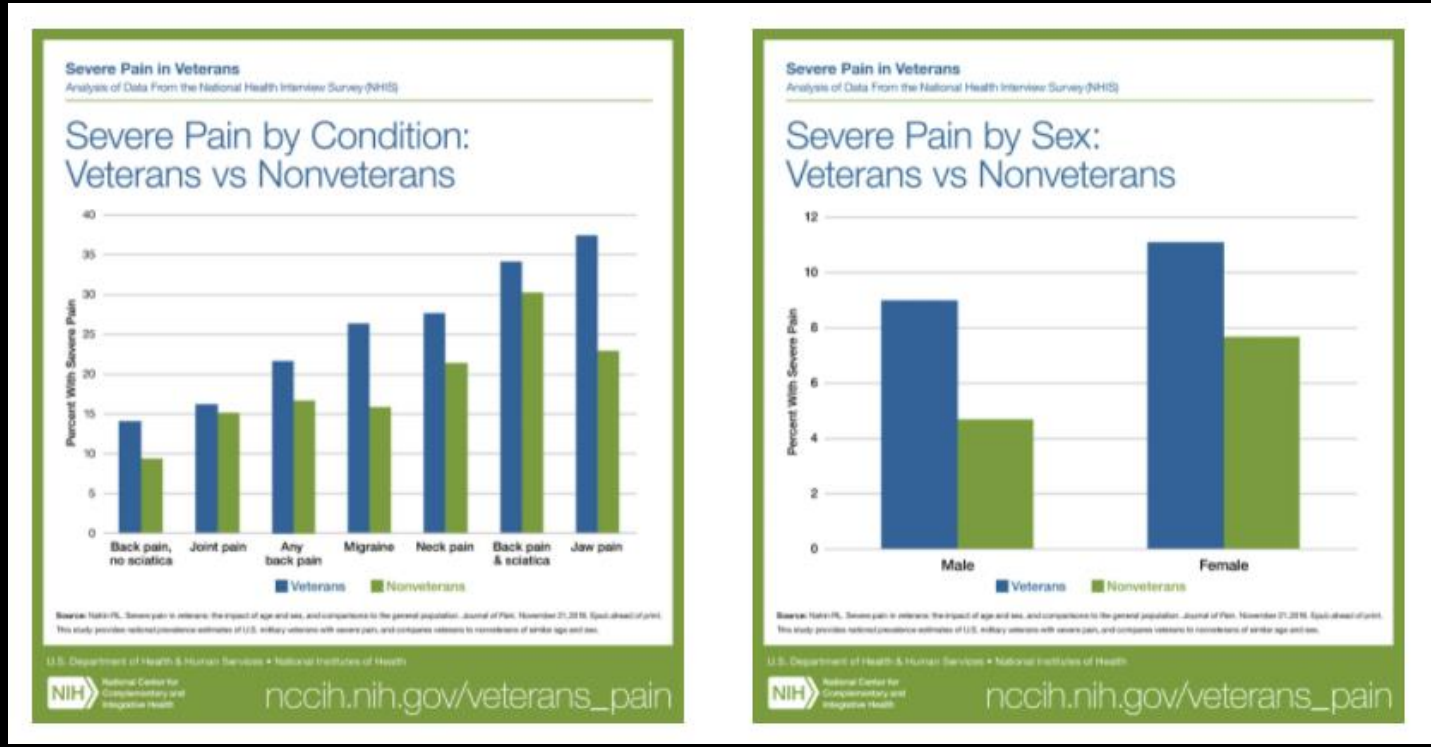
Pain in General and Veteran Populations

- Pain is one of the most common reasons for seeking care.
- Chronic pain is ongoing pain that usually lasts longer than six months.
- Per CDC, 50 million U.S. adults have chronic pain; and almost 20 million have high-impact chronic pain.

Pain in General versus Veteran Populations

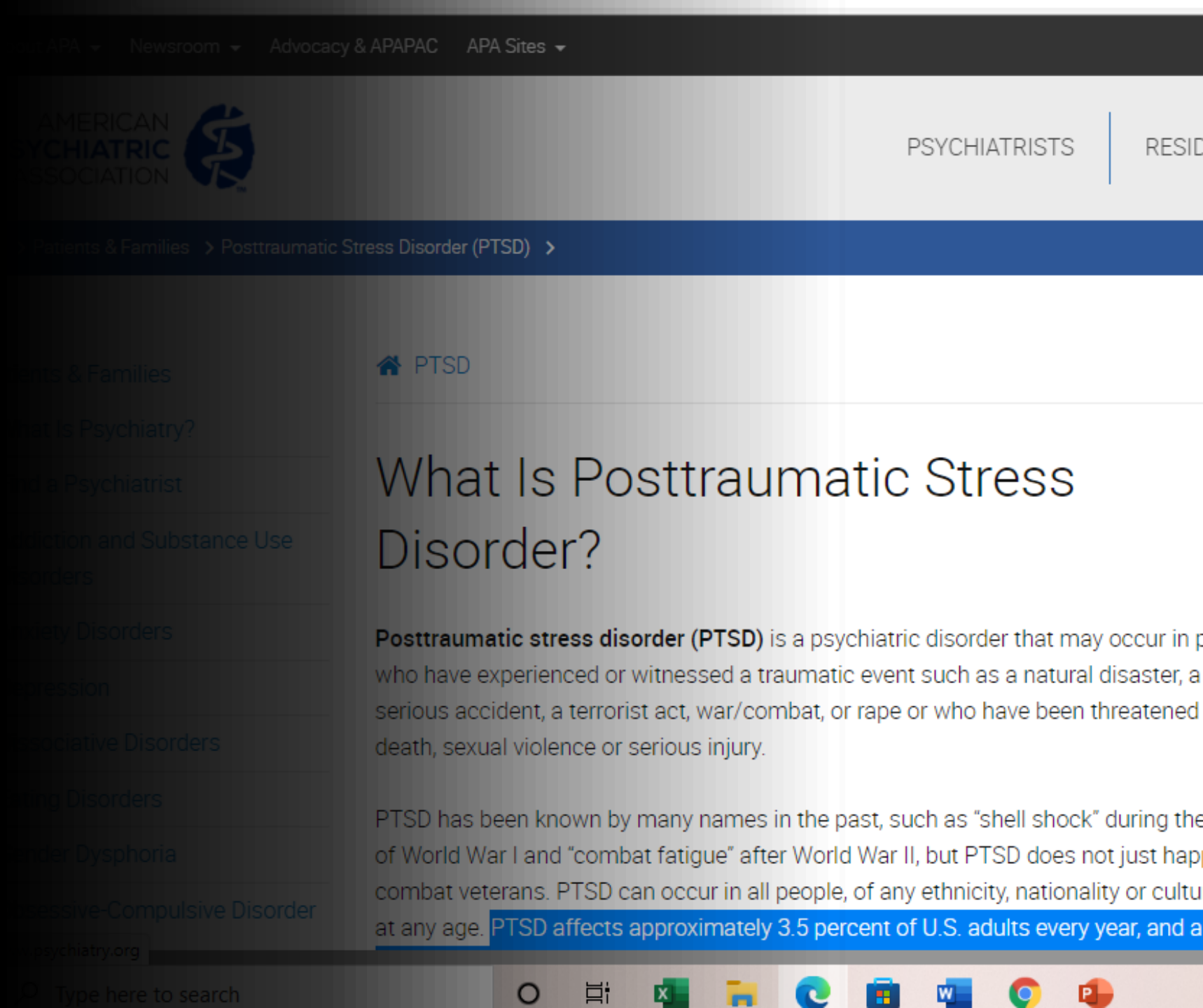


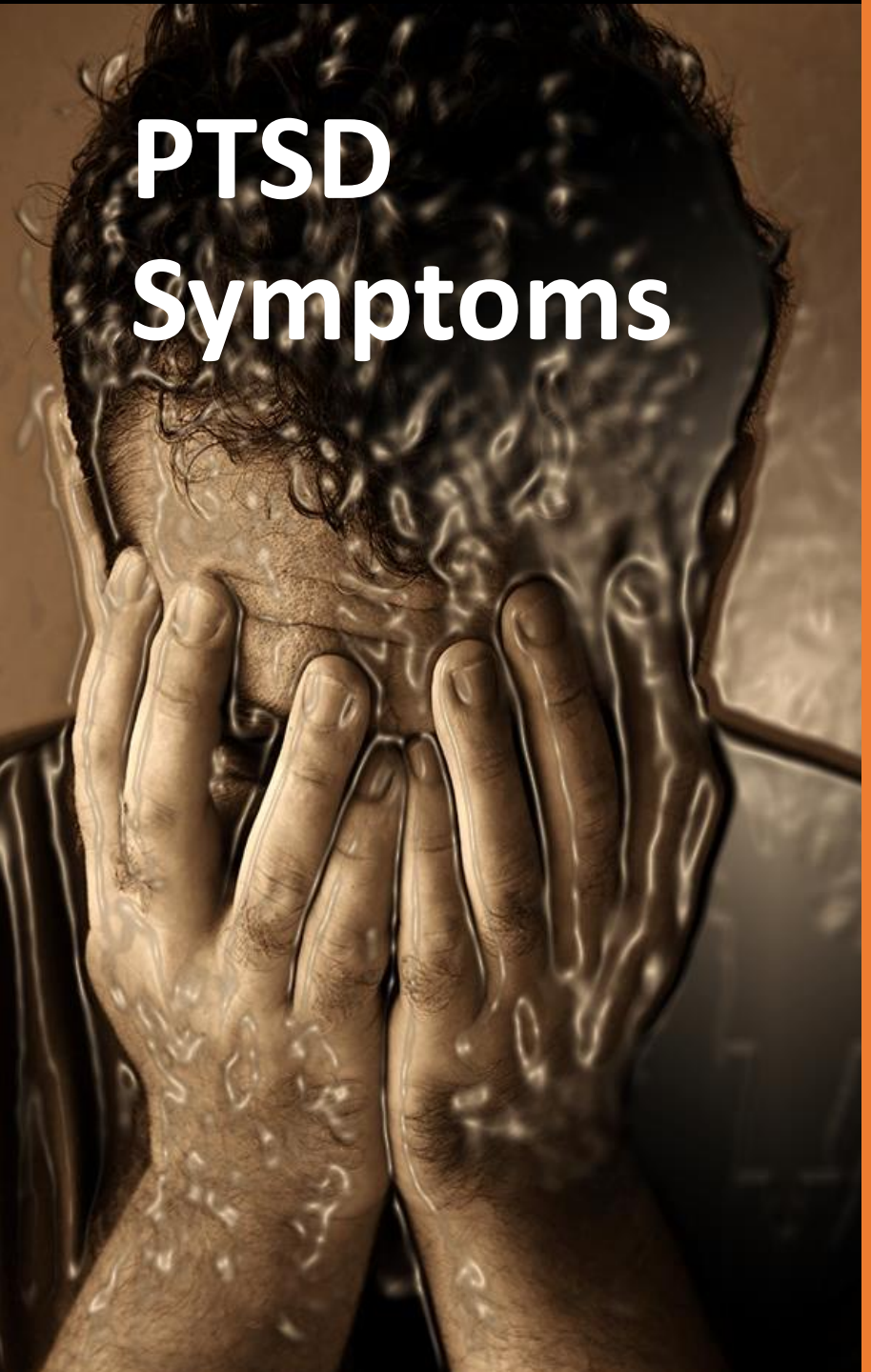
Pain in General versus Veteran Populations



PTSD Defined in General Population

- “A psychiatric disorder that may occur in people who have experienced or witnessed a traumatic event”
- Affects about 3.5% adults/year
- 1 in 11 people in their lifetime
- Women are 2X as likely to have PTSD
- Latinos, African Americans, and American Indians disproportionately affected





PTSD Symptoms

Behavioral

- Agitation, irritability, hostility, hypervigilance, self-destructive behavior, or social isolation

Psychological

- Flashback, fear, severe anxiety, or mistrust

Mood

- Loss of interest or pleasure in activities, guilt, or loneliness

Sleep

- Insomnia or nightmares

Emotional numbing/detachment

Unwanted intrusive thoughts

Avoidance

PTSD is comorbid with depression, anxiety, stress, and fatigue

https://www.nimh.nih.gov/health/topics/post-traumatic-stress-disorder-ptsd

https://www.mayoclinic.org/diseases-conditions/post-traumatic-stress-disorder/symptoms-causes

PTSD Estimates in Veterans

National Vietnam Veterans Readjustment Study

- Veteran sample was 30.9% for men and 26.9% for women

Gulf War Veterans

- Gulf War Veteran sample was 12.1%; estimated prevalence was 10.1%

Operation Enduring Freedom/Operation Iraqi Freedom

- PTSD prevalence of current PTSD was 13.8%

Estimated lifetime prevalence of PTSD among Veterans was **30.9% for men and 26.9% for women**.

Epidemiology of PTSD - PTSD: National Center for PTSD (va.gov)

Sometimes I just want to crawl in bed and stay there. Instead of being angry at everybody else, I turned it against myself. Very suicidal, many times ....

I didn't want sex because of things that happened over there.

I don't know how to interact with people anymore because . . . I don't trust anybody.

If you're afraid to go to sleep, you stay up . . . (you're) not fully awake but you're not fully rested . . . but it's still not having, have normal sleep, nightmares and stuff.

I avoid people, I've got anxiety disorder, I've got all this stuff going on and before this I used to be extremely outgoing . . . I can't go out . . . now I barely want to breathe.

I love them (family) very dearly. I just don't feel it . . . I have no feelings.

When I came back, I was so angry. I was mad at everybody, anybody, and everything.

. . . I went into my escapes . . . such as drugs, alcohol, criminal behaviors, promiscuous behavior, so I was not able to raise my kids . . .

Qualitative Inquiry Explores Health-Related Quality of Life of Female Veterans With Post-Traumatic Stress Disorder FREE

Jolie N. Haun, PhD, EdS, Allyson Duffy, PhD, Jason D. Lind, PhD, MPH, Pamela Kisala, MA, Stephen L. Luther, PhD, MA

Military Medicine, Volume 181, Issue 11-12, November-December 2016, Pages e1470–e1475, https://doi.org/10.7205/MILMED-D-16-00064

Study Background

Chronic pain is one of the **most prevalent** medical conditions among Veterans. **Prevalence of PTSD is higher in patients with chronic pain.**

Pain and PTSD impact daily function, quality of life, and quality of relationships with others.

Adverse outcomes associated with pharmacological interventions are **opioid use disorder, overdose, and sometimes death.**

Whole Health, including Complementary and Integrative Health (CIH) Modalities, is a **national VA transformation initiative.**

Study Background

Adjunctive nonpharmacological, whole health oriented, interventions are needed to support Veterans' chronic pain and PTSD symptom management.

Adjunctive therapies, like Mission Reconnect only ***complement*** **evidence-based therapies for pain and PTSD** and should not be used in place of healthcare.

Massage therapy is reported as the most preferred CIH modality and has evidence to support treatment of pain.

Research to assess **impact of massage on PTSD symptoms** is warranted.

Remotely delivered complementary and integrative health interventions are **often low-cost sustainable ways to improve access to adjunctive modalities.**

Mission Reconnect
WELLNESS TRAINING FOR VETERANS AND THEIR PARTNERS

Mission Reconnect (MR) is an evidence-based CIH adjunctive program

For **Service Members, Veterans, and their partners**

Web and mobile based program

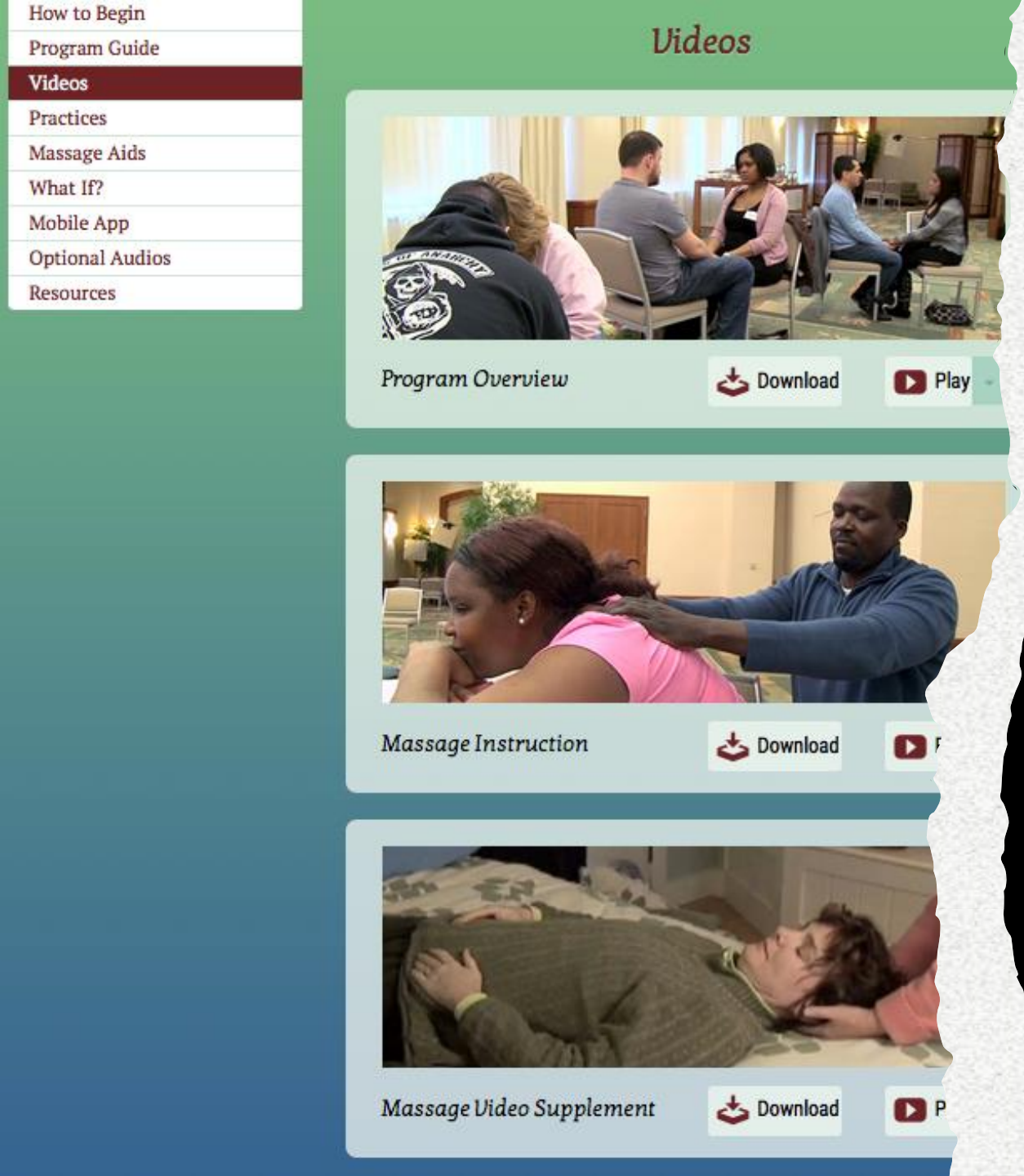
Teaches **techniques that 2 people can use individually or together**

Teaches **partnered massage and lessons on meditation, relaxation, and relationship**

- **Reduce pain, anxiety and stress**
- **Promote individual well-being**
- **Improve the quality of relationship**

Mission Reconnect
WELLNESS TRAINING FOR VETERANS AND THEIR PARTNERS

Mobile app, available for iOS, Android and Windows Phones


How to Begin
Program Guide
Videos
Practices
Massage Aids
What If?
Mobile App
Optional Audios
Resources
Videos
Program Overview
Download
Play
Massage Instruction
Download
Massage Video Supplement
Download

Videos

Practices

Connecting With Yourself

Morning Gratitude	Why	Play	Down
Mirror Greeting	Why	Play	Down
Loosening and Relaxing	Why	Play	Down
Waking Up the Body	Why	Play	Down
Reset and Refresh	Why	Play	Down

Connecting With Quiet

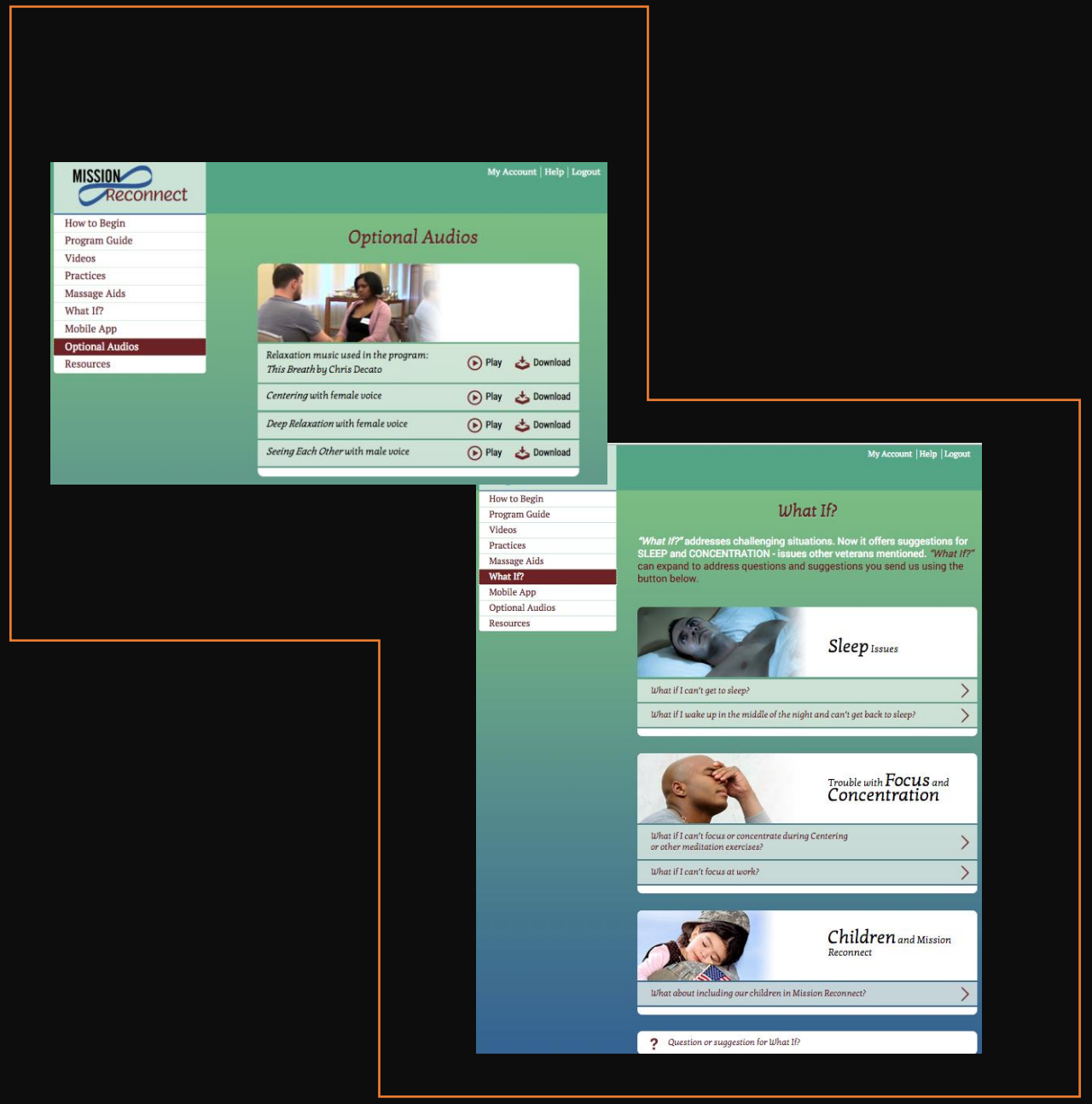
Centering	Why	Play
Movement Into Stillness	Why	Play
Deep Relaxation	Why	Play

Connecting With Your Par

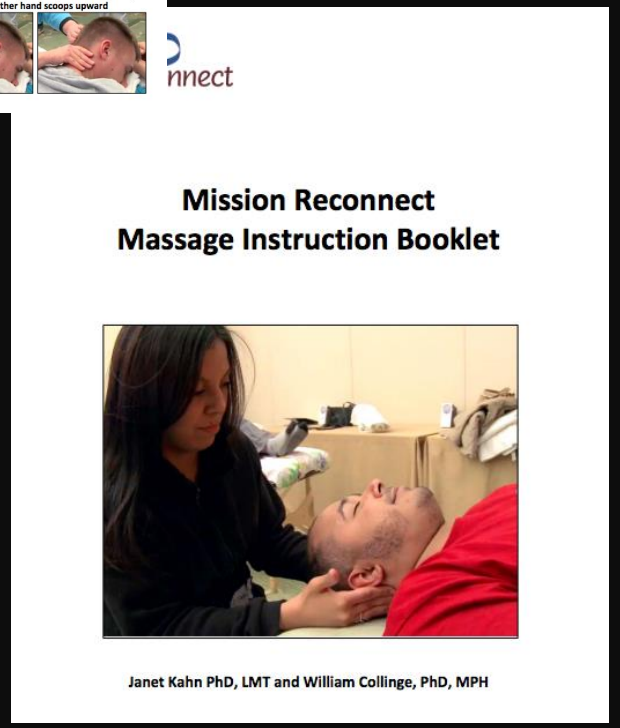
Seeing Each Other	Why	Play
Giving Massage	Why	Play
Recieving Massage	Why	

Practices

Optional Audios & Support Resources



Instructional Booklet & Handout



Project Aims

AIM 1. Determine Mission Reconnect's effectiveness for:

- Physical (pain, sleep)
- PTSD (intrusion, arousal, avoidance, numbing)
- Psychological (depression, stress, anxiety) symptoms
- Global health (quality of life) for Veterans

AIM 2. Determine Mission Reconnect's effectiveness for social (relationship satisfaction, compassion for self/others) outcomes among Veterans and their partners

AIM 3. Describe Veteran and partner perceived value of Mission Reconnect in a sub-sample of participants

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PMCID: PMC6535978
PMID: 31094345

A Mobile and Web-Based Self-Directed Complementary and Integrative Health Program for Veterans and Their Partners (Mission Reconnect): Protocol for a Mixed-Methods Randomized Controlled Trial

Monitoring Editor: Gunther Eysenbach

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Conceptual Model

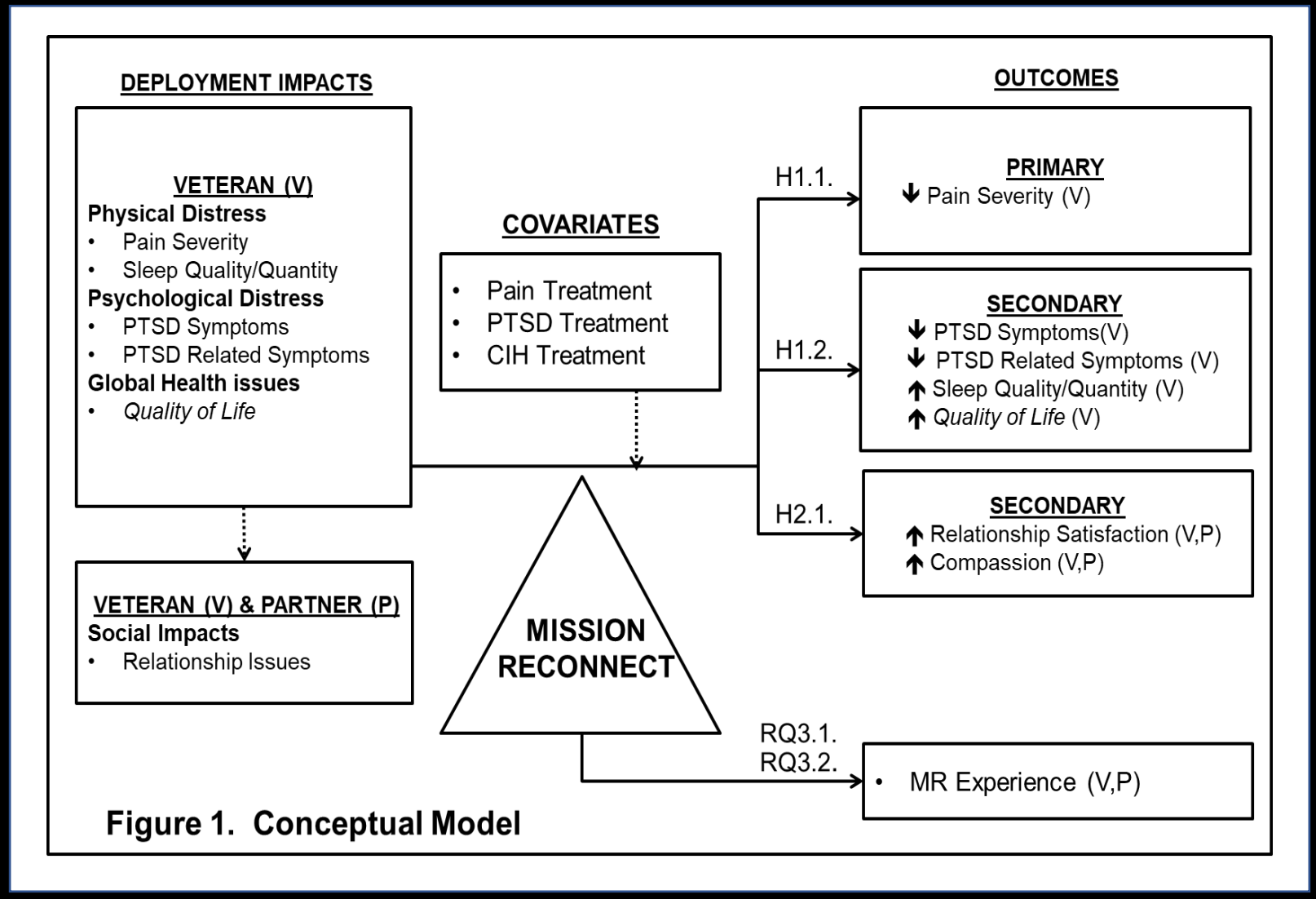
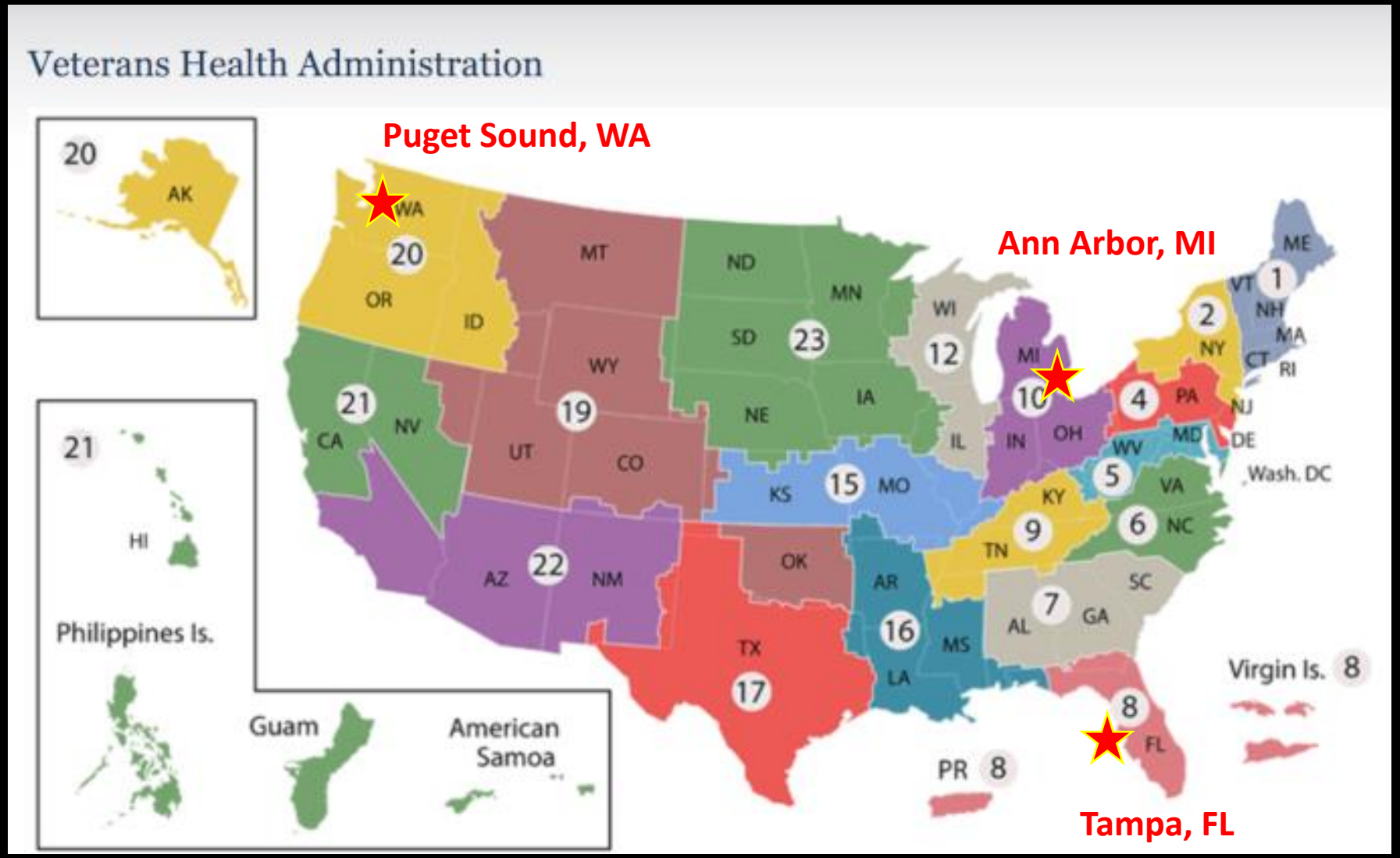


Figure 1. Conceptual Model

Project Sites



Project Sample

Veteran with Chronic Pain & PTSD

18 years old or older

Willing partner to participate

English-language fluency

Technology access

Project Study Flow Chart

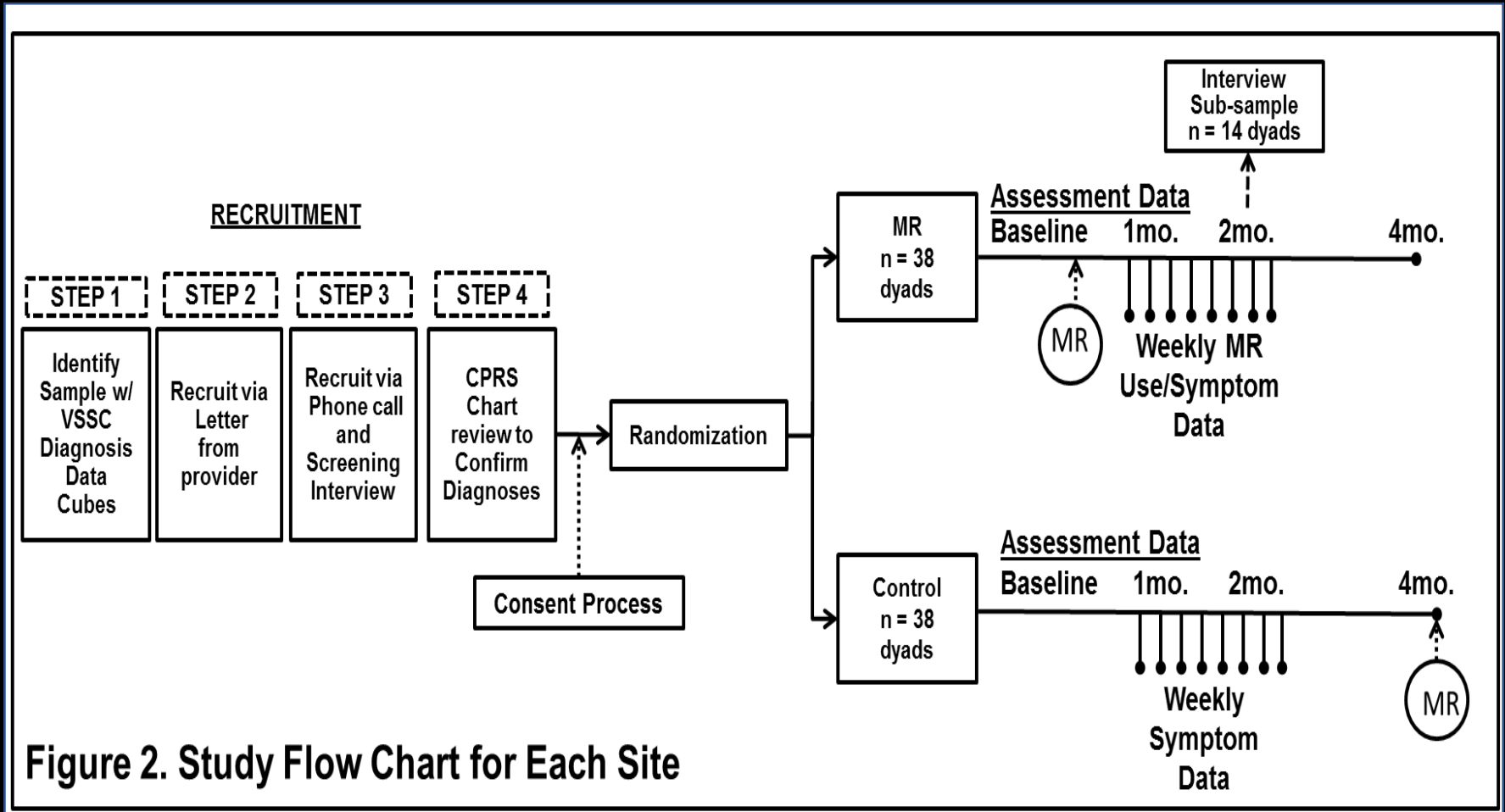


Figure 2. Study Flow Chart for Each Site

Project Methods

Weekly e-Surveys of Pain, Stress, and Tension Symptoms

Weekly e-Surveys on MR Utilization

Baseline, 1, 2, 4 Month e-Survey Battery

Telephone Interviews

Self Reported Measures

Scale	Construct	Description	Items
Pain			
POQ-VA	Pain	Pain Intensity, Interference (Mobility, Activities of Daily Living), Negative Affect, Vitality, and Fear of Movement	19
DVPRS	Pain	Pain Intensity, Interference (Activity, Sleep), and Impact of Psychological Health (Mood, Stress)	5
PST	Pain	Pain, Muscle Tension, and Stress	3
Psychological			
PCL-5	PTSD	Items assess individual PTSD symptoms such as intrusive re-experiencing of traumatic event, avoidance of triggers reminiscent of traumatic event, negative affect, and hyperarousal.	20
BDI-II	Depression	Items assess common depression symptoms such as sadness, guilt, and sleep and appetite problems.	21
PSQI	Sleep Disturbance	Items assess multiple sleep disturbance factors such as time slept, sleep quality, and barriers to sleep in the past month.	19
PSS	Perceived Stress	Items assess multiple sleep disturbance factors such as nervousness, sleep quality, coping abilities, and self-confidence in the ability to handle stress.	4
HRQoL			
SF-12	Health-Related Quality of Life	Quality of life using physical status and mental health distress.	12
Relationships			
RDAS	Relationship Satisfaction	Relationship Cohesion, Consensus, and Overall Satisfaction within the Dyad.	14
SCS	Self-Compassion	Compassion participants show themselves during difficult times.	26

Item-level response options vary by domain.
[+]Reverse-scored for interpretive consistency.
BDI-II = Beck Depression Inventory-II; CLS = Compassionate Love of Close Others Scale; Defense and Veterans Pain Rating Scale = DVPRS; HRQoL = Health-Related Quality of Life; PCL-5 = Posttraumatic Stress Disorder (PTSD) Checklist for Diagnostic and Statistical Manual of Mental Disorders-Fifth Edition; POQ-VA = Pain Outcomes Questionnaire-Veterans Affairs; PSQI = Pittsburgh Sleep Quality Index; PSS = Perceived Stress Scale; PST = Pain, Stress , and Tension; Revised Dyadic Adjustment Scale = RDAS; SCS = Self-Compassion Scale; SF-12 = Short Form-12.

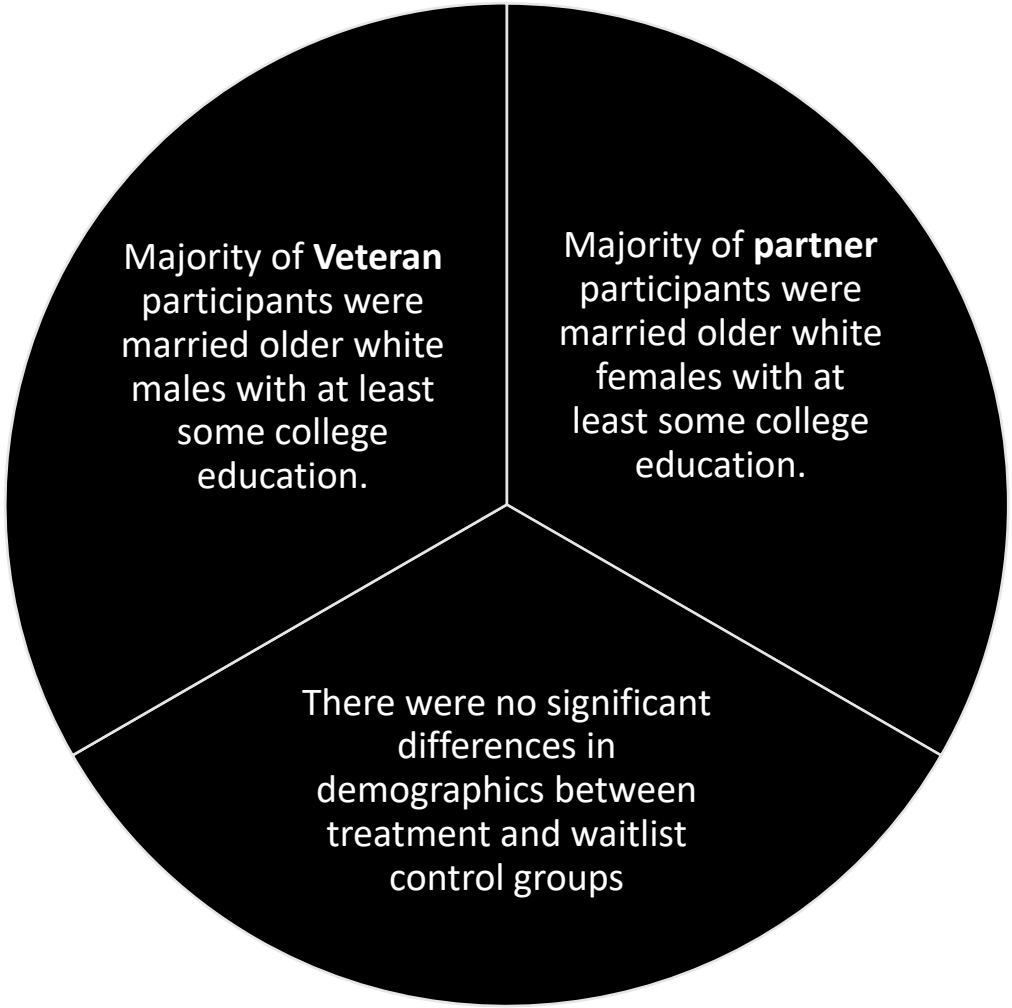
Telephone Interviews

Analytic Approach

- Descriptive frequencies and percentages or mean and standard deviations, and cross-tabs by pain and PTSD and intensity.
- Linear mixed models were constructed for primary and secondary patient reported outcomes (PROs).
- Missing data item-level scale data were imputed with predictive mean matching (PMM).
- Qualitative content analysis of interviews with subsample of dyads (*n* = 35).

Project Results

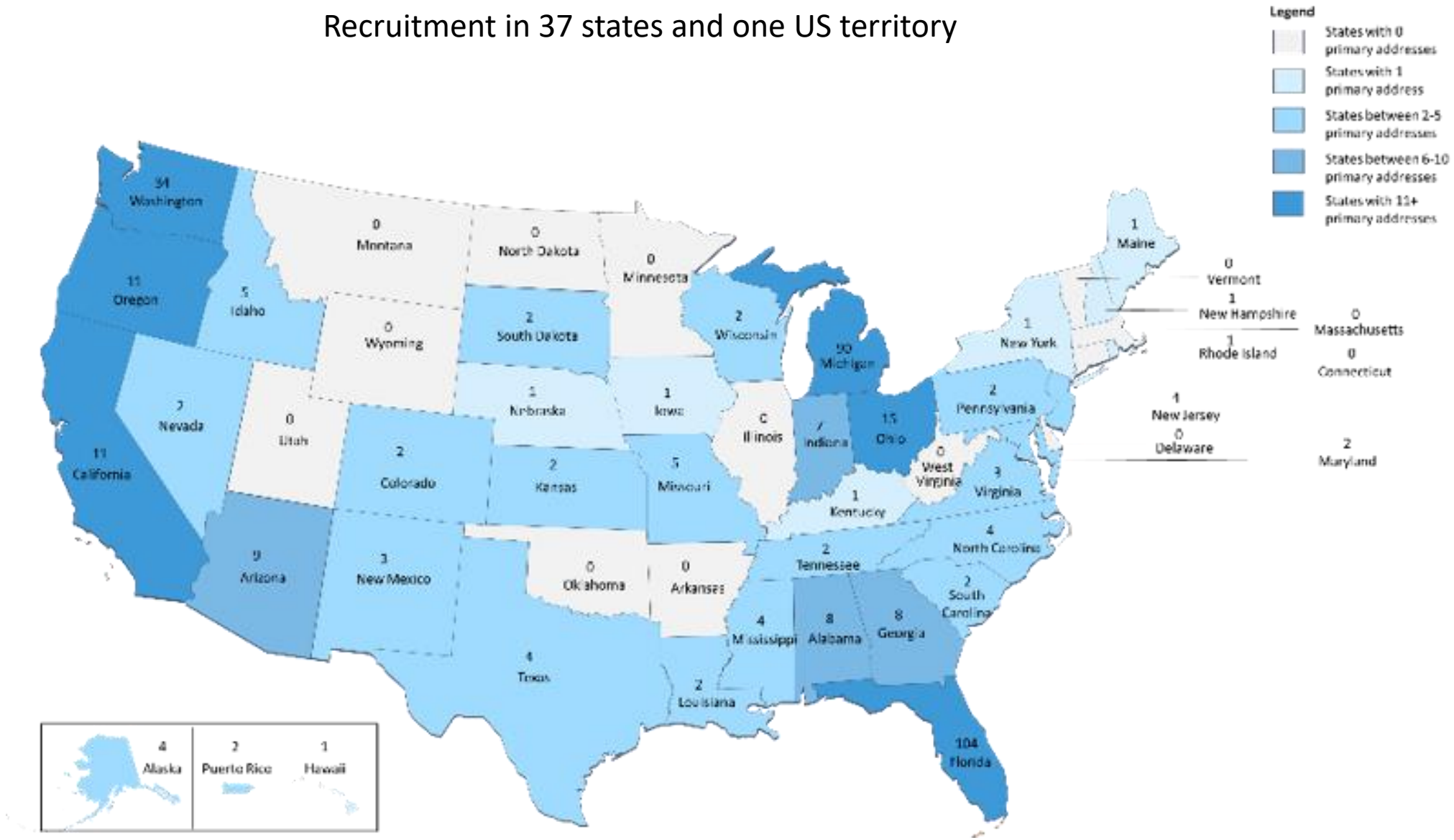
Sample Demographics



	Activated					
	Veterans			Partners		
Characteristic	Mission Reconnect $n = 140$	Wait-list control $n = 136$	p-value*	Mission Reconnect $n = 138$	Wait-list control $n = 134$	p-value*
Age in years, $m \pm sd$	55.80 ± 14.13	57.28 ± 13.35	.38	52.20 ± 13.72	52.92 ± 14.57	.68
Gender, n (%)			.48			.19
Female	39 (27.86%)	33 (24.26%)		107 (77.54%)	115 (85.82%)	
Male	99 (70.71%)	102 (75.00%)		29 (21.01%)	17 (12.69%)	
Other	1 (0.71%)	0 (0.00%)		1 (0.72%)	1 (0.75%)	
Missing/Decline to Respond	1 (0.71%)	1 (0.74%)		1 (0.72%)	1 (0.75%)	
Race, n (%)			.94			.97
White or Caucasian	102 (72.86%)	96 (70.59%)		104 (75.36%)	102 (76.12%)	
African American or Black	19 (13.57%)	22 (16.18%)		20 (14.49%)	21 (15.67%)	
Asian	1 (0.71%)	1 (0.74%)		5 (3.62%)	4 (2.99%)	
American Indian or Alaska Native	3 (2.14%)	1 (0.74%)		1 (0.72%)	0 (0.00%)	
Multiracial	9 (6.43%)	8 (5.88%)		3 (2.17%)	2 (1.49%)	
Native Hawaiian or Pacific Islander	0 (0.00%)	0 (0.00%)		1 (0.72%)	1 (0.75%)	
Other	4 (2.86%)	6 (4.41%)		2 (1.45%)	1 (0.75%)	
Missing/Decline to Respond	2 (1.43%)	2 (1.47%)		2 (1.45%)	3 (2.24%)	
Marital status, n (%)			.48			.65
Married or partnered	109 (77.86%)	98 (72.06%)		111 (80.43%)	101 (75.37%)	
Divorced, separated, or widowed	26 (18.57%)	33 (24.26%)		13 (9.42%)	15 (11.19%)	
Single/never married	4 (2.86%)	3 (2.21%)		12 (8.70%)	15 (11.19%)	
Missing/Decline to Respond	1 (0.71%)	2 (1.47%)		2 (1.45%)	3 (2.24%)	
Education, n (%)			.81			.30
<High-school	0 (0.00%)	0 (0.0%)		0 (0.00%)	1 (0.75%)	
High-school	11 (7.86%)	6 (4.41%)		18 (13.04%)	24 (17.91%)	
Some college/vocational school	36 (25.71%)	39 (28.68%)		44 (31.88%)	30 (22.39%)	
Associate's degree	35 (22.14%)	29 (21.32%)		20 (14.49%)	27 (20.15%)	
Bachelor's degree	32 (25.00%)	35 (25.74%)		33 (23.91%)	27 (20.15%)	
Graduate degree	26 (18.57%)	25 (18.38%)		22 (15.94%)	23 (17.16%)	
Missing/Decline to Respond	1 (0.71%)	2 (1.47%)		1 (0.72%)	2 (1.49%)	
Daily computer use, n (%)	87 (62.14%)	80 (58.82%)	.74	94 (68.12%)	83 (61.94%)	.51
Daily internet use, n (%)	113 (80.71%)	109 (80.15%)	.83	120 (86.96%)	119 (88.81%)	.89
Years in relationship with partner, n (%)			.64			.84
< 10 years	50 (35.71%)	42 (30.88%)		44 (31.88%)	39 (29.10%)	
10 – 29 years	48 (34.29%)	52 (38.24%)		52 (37.68%)	53 (39.55%)	
≥ 30 years	39 (27.86%)	41 (30.15%)		39 (28.26%)	41 (30.60%)	
Missing/Decline to Respond	3 (2.14%)	1 (0.74%)		3 (2.17%)	1 (0.75%)	

Note. Percentiles may not equal 100% exactly secondary to rounding error.
* p-values obtained from t-test, chi-square, or Fisher's exact tests.

Recruitment in 37 states and one US territory



Attrition

364 dyads recruited

- 97 dyads (26.6%) failed to complete onboarding

Reasons for failure to complete onboarding include:

- Difficulties with using remote data collection methods and interventions (30.9%)
- Adverse health experiences unrelated to study activities (17.5%)
- Loss of self-elected partner buy-in (8.2%)

Classifications of Veteran Sample Pain Intensity and PTSD

	[a]Posttraumatic Stress Disorder Cutoffs		Total
	Sub-Threshold (<31)	Probable (≥31)	
[b]**Pain Intensity Cutoffs**			
Mild (<3)	14 (5.28%)	7 (2.64%)	21 (7.92%)
Moderate (4-6)	32 (12.08%)	87 (32.83%)	119 (44.91%)
Severe (≥7)	19 (7.17%)	106 (40.00%)	125 (47.17%)
Total	65 (24.53%)	200 (75.47%)	265 (100.0%)

[a]The PTSD Checklist for Diagnostic and Statistical Manual of Mental Disorders-Fifth Edition (PCL-5) was used with a validated cutoff for identifying probable PTSD among veterans. Scores <31 on the PCL-5 indicate sub-threshold or no PTSD. PCL-5 scores ≥31 suggest probable benefit from PTSD treatment.

[b]Pain intensity assessed using the 0-10 Numeric Rating Scale and categorized using valid cutoffs.

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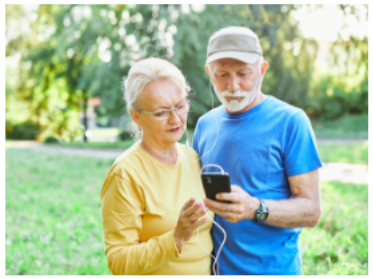
Preprints (earlier versions) of this paper are available at https://preprints.jmir.org/preprint/49678, first published June 05, 2023.



Mobile and Web-Based Partnered Intervention to Improve Remote Access to Pain and Posttraumatic Stress Disorder Symptom Management: Recruitment and Attrition in a Randomized Controlled Trial

Jolie N Haun [1,2]; Hari H Venkatachalam [1]; Christopher A Fowler [1,3]; Amy C Alman [4]; Lisa M Ballistrea [1]; Tali Schneider [1]; Rachel C Benzinger [1]; Christine Melillo [1]; Neil B Alexander [5,6]; S Angelina Klanchar [1]; William Lapcevic [1]; Dustin D French [7,8,9]

Quantitative Primary and Secondary Outcomes

- No significant change in OVERALL pain (POQ , PST, DVPRS); sleep (PSQI); PTSD (PCL-5); quality of life (SF-12); relationship satisfaction (RDAS); OVERALL self-compassion (SCS) or compassion for others (COS).
- Significant reductions in *negative affect* (POQ), *pain interference (DVPRS)* in *mood* and *sleep* was observed among the Veteran MR group that was not observed in WC group.
- Data trends show positive effects of MR on *stress*, as measured by the PST, but not as measured by PSS. Improved *mental health* was observed in MR group as measured by SF-12, but trend was not significant.
- For veterans, there was a trend of improvement in *over-identification (SCS)* seen in the MR group compared to the WC group. This effect was not observed in partners.
- For partners, there was significant improvement in *affection* and *conflict* (RDAS) seen in the MR group compared to the WC group. This affect was not observed in Veterans.

Outcomes Data Table

PRO Measure	Fixed effects β ±SE	p-value
Veterans		
POQ - Negative Affect Time*Treatment group (MR vs. WC)	-0.02 ± 0.01	0.049*
DVPRS – Sleep Time*Treatment group (MR vs. WC)	-0.01 ± 0.002	0.008**
DVPRS - Mood Time*Treatment group (MR vs. WC)	-0.01 ± 0.002	0.008**
PST - Stress Time*Treatment group (MR vs. WC)	-0.002 ± 0.001	0.100†
SF-12 – Mental Health Time*Treatment group (MR vs. WC)	0.02 ± 0.01	0.028*
SCS – Over Identification Time*Treatment group (MR vs. WC)	-0.002 ± 0.001	0.036*
Partners		
RDAS – Total Score Time*Treatment group (MR vs. WC)	0.02 ± 0.01	0.011*
RDAS – Total Consensus Time*Treatment group (MR vs. WC)	0.01 ± 0.004	0.022*
RDAS – Consensus, Subdomain: Affection Time*Treatment group (MR vs. WC)	0.01 ± 0.002	0.007**
RDAS – Total Satisfaction Time*Treatment group (MR vs. WC)	0.004 ± 0.002	0.069†
RDAS – Satisfaction, Subdomain: Conflict Time*Treatment group (MR vs. WC)	0.005 ± 0.001	0.001**

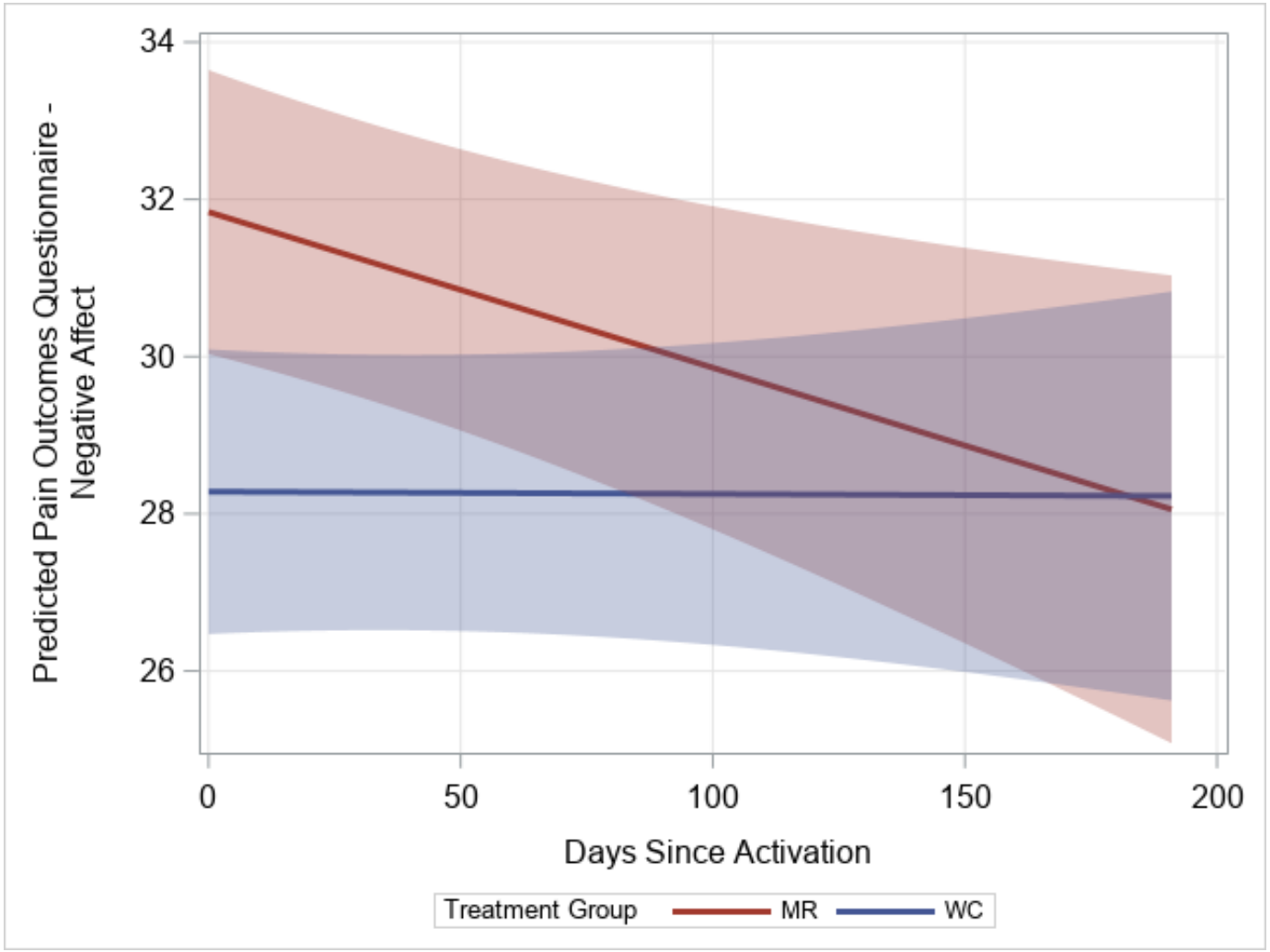
Fixed effects estimates for interaction term of time (per day) x treatment group (MR vs. WC) indicating rate of change over time differed between the MR group compared to WC. Only outcomes that were found to be statistically or borderline significant ($p \leq 0.10$) are included in the table.

**Significant at the adjust *p*-value of 0.01 for secondary outcomes.

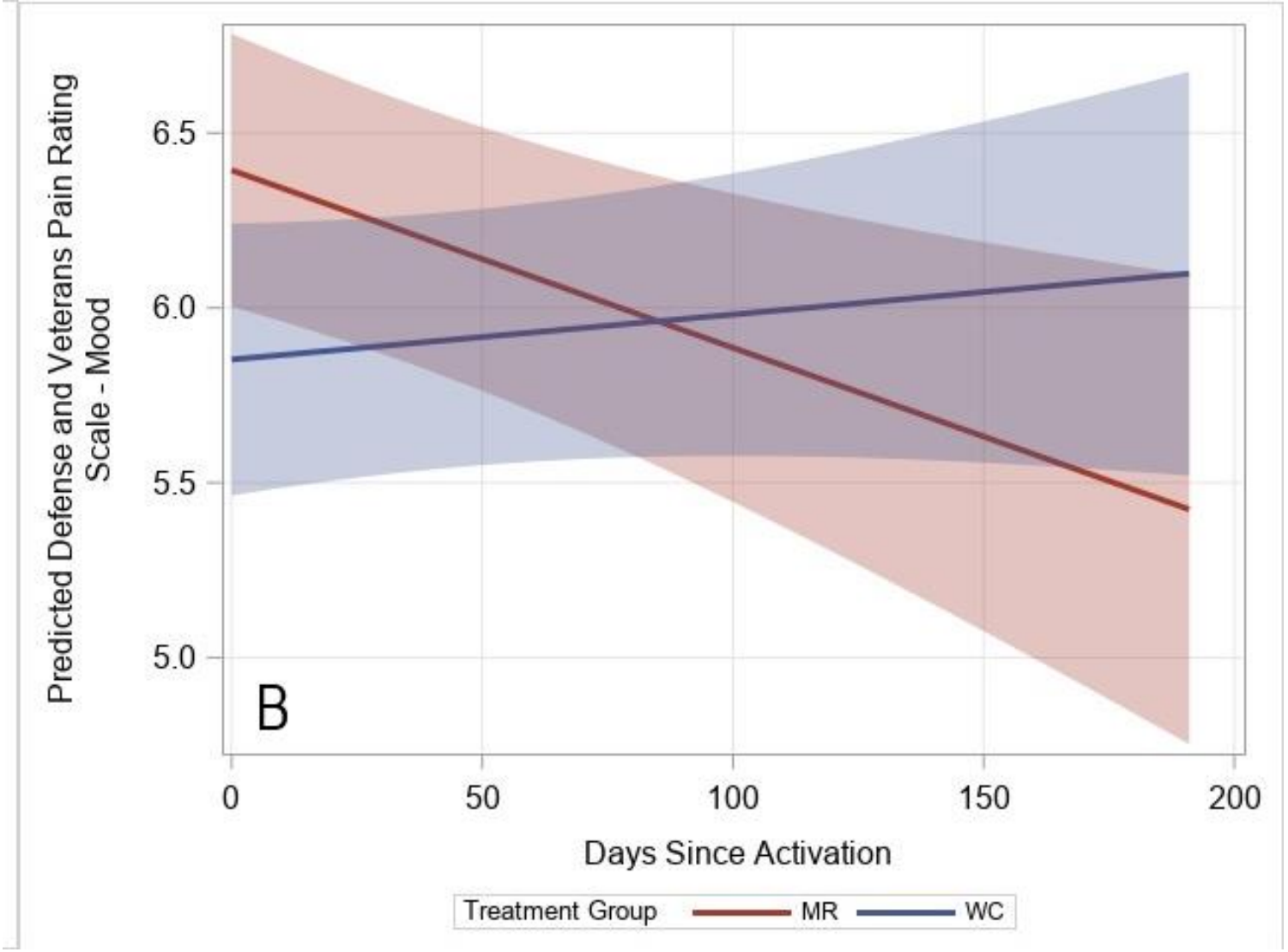
*Borderline significant *p*-value of 0.05

†Borderline significant *p*-value of 0.10

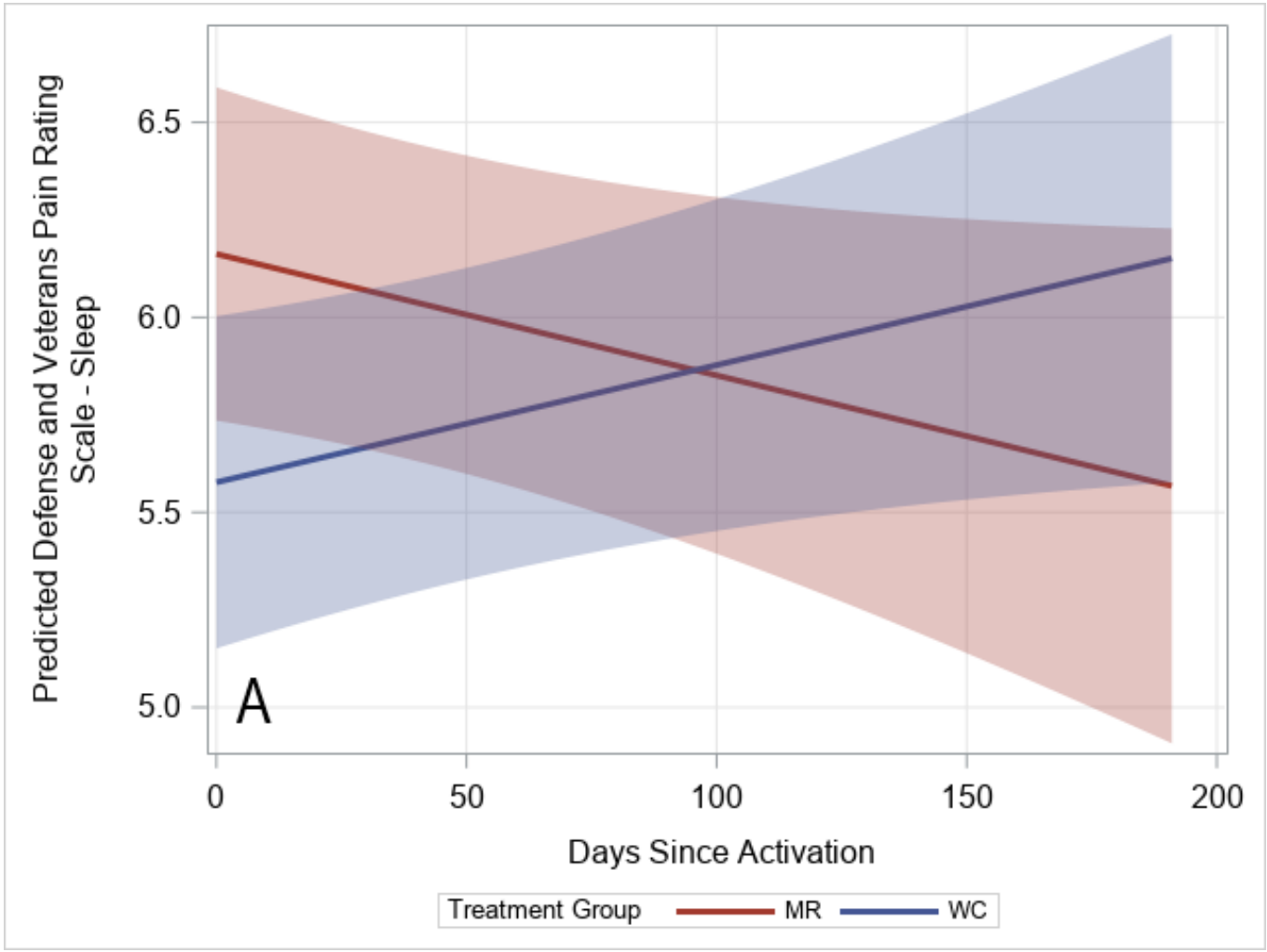
POQ Negative Affect



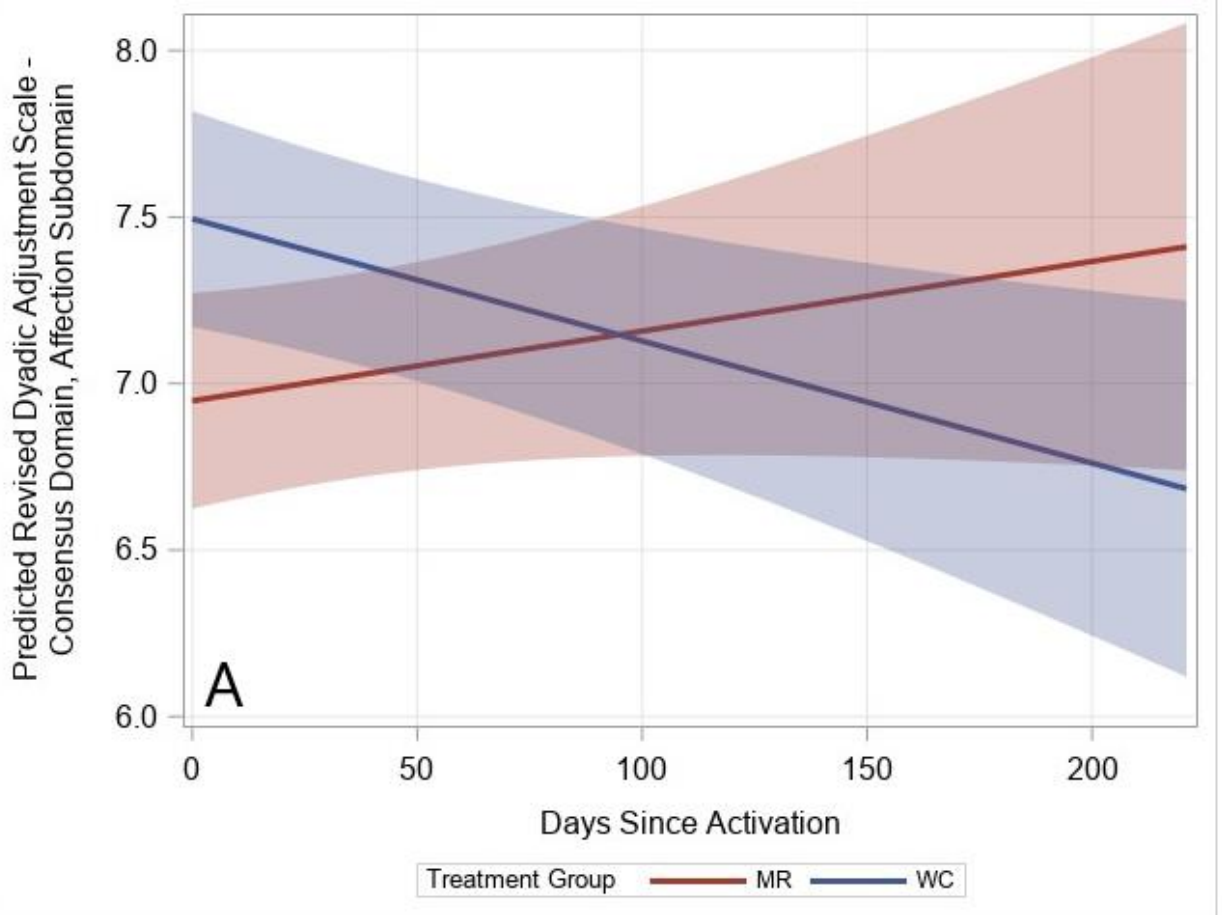
DVPRS Mood
Pain Interference



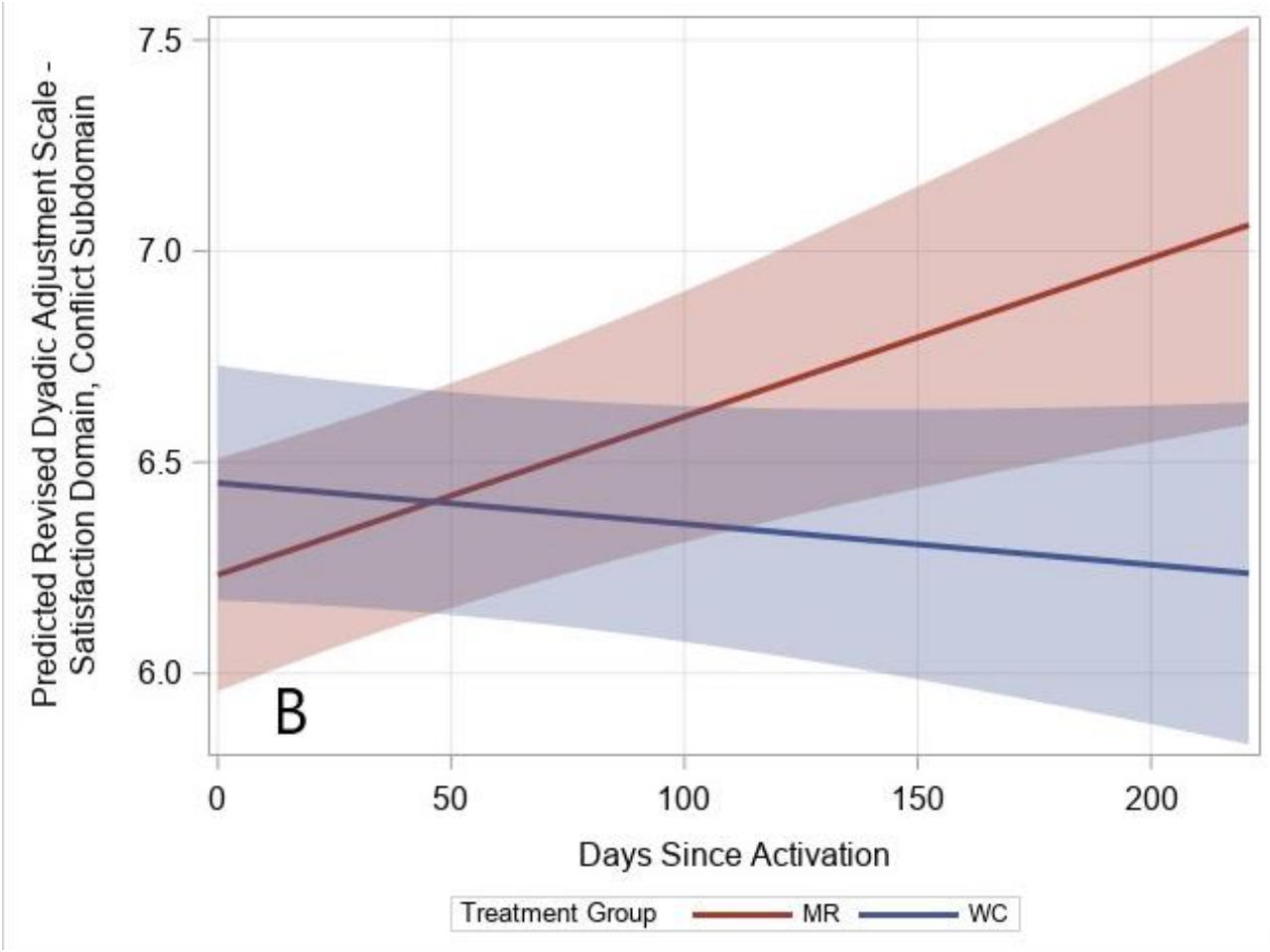
DVPRS Sleep
Pain Interference



RDAS Affection



RDAS Conflict



How did Mission Reconnect Help Veterans?

Reducing pain interference in mood and sleep reduces the extent to which pain hinders engagement with physical, cognitive, emotional, cognitive, and recreational activities, as well as sleep and enjoyment in life.

Improving relationship factors such as affection and conflict, supports improved relationship satisfaction.

Qualitative Themes: Perceptions of Mission Reconnect

Overall impression

- Liked and enjoyed the program
- Valued specific activities as addressing specific matters /conditions
- Partners inclusion
- Promoted positivity
- Obtaining skills
- Reinforced existing practices

Before I started doing that, it was like, harder to get up in the morning... And now it's just like—No, you can do this. And when I started thinking—Okay, I'm thankful for this, and I'm grateful for this and I'm grateful for that". (673_1212_V)

Usability and navigation

- Portability especially when using the app
- Some activities can be done anywhere
- Navigation & accessibility –opinions varied
- Lacking guidance
- Tech support

"If you could get in the [local area] where you have somebody, where there's a location that you could come up with. Like if you have a doctor or somebody who was certified to come, and it's kind of like a meeting, a group gathering". (673_1210_P)

Qualitative Themes: Access to Mission Reconnect

Most participants report scheduling MR and incorporating into their daily routines. Nearly half reported using the MR app or learned techniques while away from their computer.

Barriers to using MR included:

- Personal characteristics
- Finding time
- Personal situations (e.g., recent move)

"I glanced at it very briefly when we first got it, but it just wasn't in the timetable." (673_1212_P)

Facilitators to using MR included:

- Proper environment
- Experiencing benefit from MR
- Program content and structure

"..the truth is, I can do [Connecting with Quiet] if I can find the space once my wife and child's gone to sleep, …for an hour or more.(673_1210_V)

Qualitative Themes: Mission Reconnect Effects

Physical Health

- Improved sleep
- Reduced pain

okay, since we're in this program, let me actually try this and see if I feel better. And those nights I did tend to sleep much better, for sure.' (D28 673_1140_P)

Psychological Health

- Reduced anxiety
- Stress relief
- Improvement in PTSD symptoms
- Feeling calmer and more relaxed

"The videos are helpful so that I can seek out the help I need when I get anxious, or I have an attack, or my PTSD is just overwhelming that day." (673_1210_V)

Social Relationships

- More time together
- Strengthened relationship
- Improved communication

"I try using [the tools] because of the fact that I just want to maintain a greater relationship with my daughters, and my parents, my spouse, that's why I do all those. " (673_1123_V)

Qualitative Themes: Recommendations to Improve Mission Reconnect and Dissemination

Recommendations to Improve Use

- Include additional content, such as a shorter videos, content for family including kids, additional meditations, advanced material
- Accommodate different learning styles (subtitles, audio, written, video)
- Organize content by symptom and have questionnaire to help user identify what they should use

Recommendation to Disseminate MR

- VA support
- Involve providers from other services, including home based care

Any Veteran and family member, you know, it could be somebody just struggling with sickness or medical or mental health issues. I think it could help a larger group of people. (673_1212_P)

Data Triangulation

Convergence: Survey and interview data indicate improvement in pain interference and over-identification trends for Veteran participants.

I've been doing different things like that which I find good for helping me to let stuff go. You know? Forgetting the past because it's not important and reminding myself that the future isn't here, so it's this, try to keep myself in the present. And I find that when I'm successful doing that I feel better. (506 2201V)

Yeah, I think it's helped me—you know, being able to connect with my wife. It's helped me to feel more comfortable sharing with her when I have thoughts or struggles, or I'm just kind of feeling out of it. You know, I feel like I can—because we're more connected, I can share with her. (506-2161V)

Data Triangulation

Divergence: Interview data indicate improvement for partner participants.

One of the things I really appreciated about the Morning Gratitude and the Deep Relaxation, I didn't use it as frequently as I probably could have, but using it the times I did, I used it at times when I really needed it. So, it was helpful. (673-1252P)

Divergence: Interview data indicate improvement for Veteran pain and PTSD symptoms.

The quiet time, I like that one the most because it helps me learn to control my emotions and it guided me onto understanding my emotions. (673-1201V)

After touching, it's like—Actually, this part right here doesn't hurt much. It's like I can be thankful for the parts that I touch that actually don't hurt. So it helps me kind of realize I do have a few places on my body that don't hurt. I'm thankful for that. (673-1212V)

Poll Question

Do you believe online services, such as Mission Reconnect, are sustainable for self-care management within VA?

A. Yes
B. Maybe
C. Probably not
D. No

Project Conclusions

Adjunctive modalities can be delivered using web/mobile based apps

Mission Reconnect may be beneficial for Veterans with pain and PTSD and their partners

Further research is needed to assess implementation for vulnerable, at-risk populations

Future Research & Special Considerations

Recommendations

- Replicate for stratified analysis Pain/PTSD profiles
- Explore divergence of interview and survey data
- Examine fit of outcome measures
- Evaluate intervention dosage effects
- Assess professional versus partnered massage, with attention to PTSD symptoms
- Assess implementation factors to inform sustained implementation.

Challenges

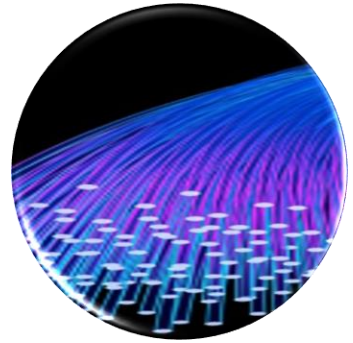
Regulatory and Security

Participant Recruitment

Participant Enrollment

Data Collection Systems

Data Collection of Outcome Measures



Standardizing Process Across Sites

Special Considerations

Take proactive approach to working with participants with PTSD & pain	Suicidal ideation (SI) more common than general population	May have higher attrition rates than general population
• Document/track and disseminate barriers and solutions. • Pilot processes early in project to make modifications to onboarding, data collection, and processes to meet participants needs.	• Increase ceiling on SI reporting - change SI trigger from thoughts to trigger plan & intent. • Consider a dedicated clinical psychologist to screen for SI and response to reported participant mental health needs.	• Set realistic expectation. • Simplify and ensure user-friendly onboarding process. • Proactively identify health factors and disqualifiers in advance.

Special Considerations

Increased risk of frustration with onboarding and data collection processes	Potential perceived data collection burden	Potential lack of engagement in project processes
• Simplify onboarding process and provide personal support. • Increase automation where possible and reduce use of usernames & passwords.	• *Revisiting trauma is a risk.* • Be cognizant of emotional, mental, & physical health burden. • Use validated measures, but also avoid multiple measures to reduce redundancy to minimize response burden.	• Simplify processes. • Provide reminders. • Provide project navigator.

Thank you!!

Group Discussion