



Implementing Data-Driven Strategy

# National Veterans Wellness and Healing Center

PCL-5 Test Score Analysis

March, 2022

## Goals and Objectives



1. Analyze success of therapy by comparing PCL-5 test scores of participants prior to and immediately after the retreat
2. Demonstrate therapy viability to form new partnerships with larger veteran focused foundations
3. Inform current and potential donors about the success of therapy
4. Utilize results to engage new clients and expand veteran patient pool



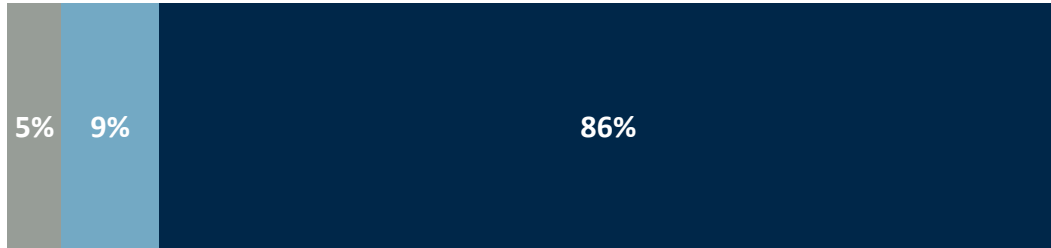
<http://veteranswellnessandhealing.org>

# Data Analysis and Overview

Data Assumptions	Data Adjustments	Segmentation Breakdown	Benchmarking
<p>Data assumptions and analysis by Cicero:</p> <ul style="list-style-type: none"> <li>Data was provided by NVWHC. All analysis and conclusions are based off the assumption that the data was accurately recorded</li> <li>There were two groups of outliers we believe were present in the data set. One being participants who saw a <math>\geq 50</math> point reduction in scores (12 total), and those who had a "Post" score of <math>\leq 4</math> (10 total)</li> <li>The above outliers were removed for two charts (<i>as noted in chart titles</i>) but left in for the remainder of the analysis</li> <li>Only test scores for the Veterans were analyzed and included in this analysis, and not their partners</li> </ul>	<p>The following adjustments were used in the data analysis:</p> <ul style="list-style-type: none"> <li>Veteran test scores in data set with "n/a" for either pre or post scores were removed (6 total)</li> <li>"Sponsor Couple" data sets were removed (2 total)</li> <li>Branch: For those with more than one branch listed, the first listing was used (3 total)</li> <li>Conflict: For those with more than one conflict listed, the first listing was used (2 total)</li> <li>Minimal Conflict Count: Conflicts that were only listed by one participant were combined into a single grouping</li> <li>Outlier adjustments previously mention</li> </ul>	<p>Segmentations were broken down into the following categories:</p> <ul style="list-style-type: none"> <li>Total population</li> <li>Gender</li> <li>Branch of service</li> <li>Conflict</li> <li>Attendance with/without partner</li> <li>Year of attendance</li> </ul>	<p>The following benchmark information was taken to the US Department of Veteran Affairs website and was used to determine the effectiveness of therapy:</p> <ul style="list-style-type: none"> <li>A PCL-5 test score <math>\geq 32</math> was used to determined if the participant was currently suffering from PTSD symptoms at the point of assessment</li> <li>A 5-10 point reduction in test score was used as the minimum reliable change to determine if the participant responded to treatment, and the response was <i>not</i> due to chance</li> <li>A 10 or greater point reduction in test score was used as minimum for determining if there was a <i>clinically</i> meaningful change</li> </ul>

# Market Segmentation Analysis

## Total Participants

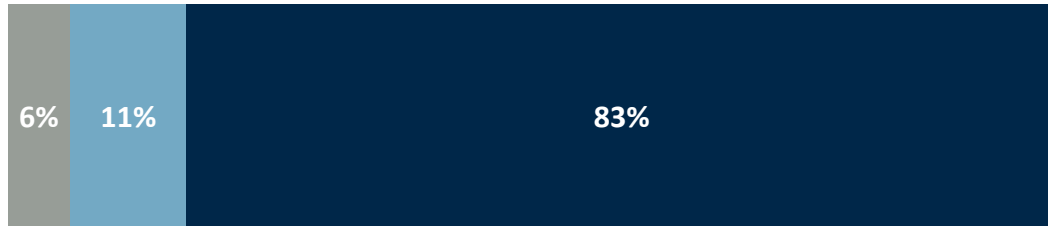


< 5 pt Decrease	Between 5-10 pt Decrease	> 10 pt Decrease
Only 5% had little to no response to the retreat indicating a change in their PCL-5 score of less than 5 points.	9% of participants responded to the retreat therapy in a positive manner indicating a reduction in their PCL-5 score between 5-10 points.	86% of participants saw a clinically effective change in their PCL-5 score following the retreat indicating a reduction in PCL-5 score of 10 or greater points.

- 97 Total Participants in Segment
- 86% Percentage of Segment Participants with Clinical PTSD\* Symptoms Prior to Retreat
- 21% Percentage of Segment Participants with Clinical PTSD\* Symptoms After Retreat
- 76% Participant Reduction in Clinically Diagnosed PTSD
- 28 Average Decrease in PCL-5 Score

# Market Segmentation Analysis

**Total Participants (Excluding Data with >= Negative 50 Point Change)**

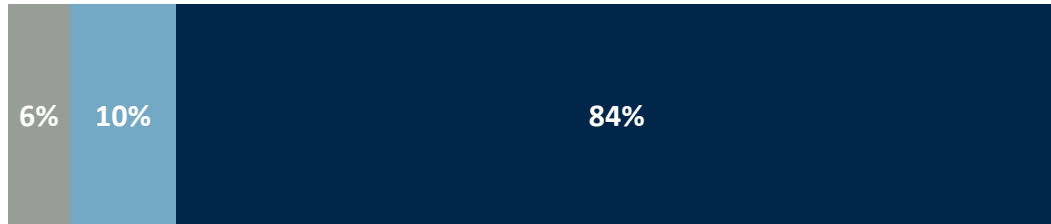


< 5 pt Decrease	Between 5-10 pt Decrease	> 10 pt Decrease
Only 6% had little to no response to the retreat indicating a change in their PCL-5 score of less than 5 points.	11% of participants responded to the retreat therapy in a positive manner indicating a reduction in their PCL-5 score between 5-10 points.	83% of participants saw a clinically effective change in their PCL-5 score following the retreat indicating a reduction in PCL-5 score of 10 or greater points.

- 85** Total Participants in Segment
- 84%** Percentage of Segment Participants with Clinical PTSD\* Symptoms Prior to Retreat
- 24%** Percentage of Segment Participants with Clinical PTSD\* Symptoms After Retreat
- 72%** Participant Reduction in Clinically Diagnosed PTSD
- 25** Average Decrease in PCL-5 Score

# Market Segmentation Analysis

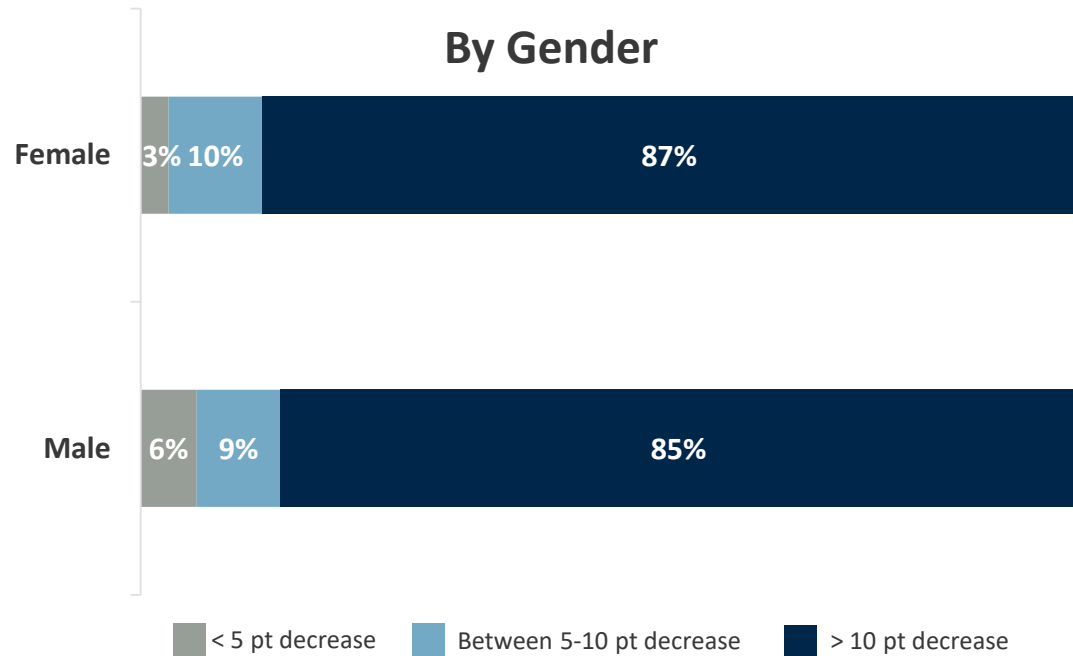
**Total Participants (Excluding Data with Total Post Score <= 4)**



< 5 pt Decrease	Between 5-10 pt Decrease	> 10 pt Decrease
Only 6% had little to no response to the retreat indicating a change in their PCL-5 score of less than 5 points.	10% of participants responded to the retreat therapy in a positive manner indicating a reduction in their PCL-5 score between 5-10 points.	84% of participants saw a clinically effective change in their PCL-5 score following the retreat indicating a reduction in PCL-5 score of 10 or greater points.

- 87** Total Participants in Segment
- 89%** Percentage of Segment Participants with Clinical PTSD\* Symptoms Prior to Retreat
- 23%** Percentage of Segment Participants with Clinical PTSD\* Symptoms After Retreat
- 74%** Participant Reduction in Clinically Diagnosed PTSD
- 28** Average Decrease in PCL-5 Score

# Market Segmentation Analysis

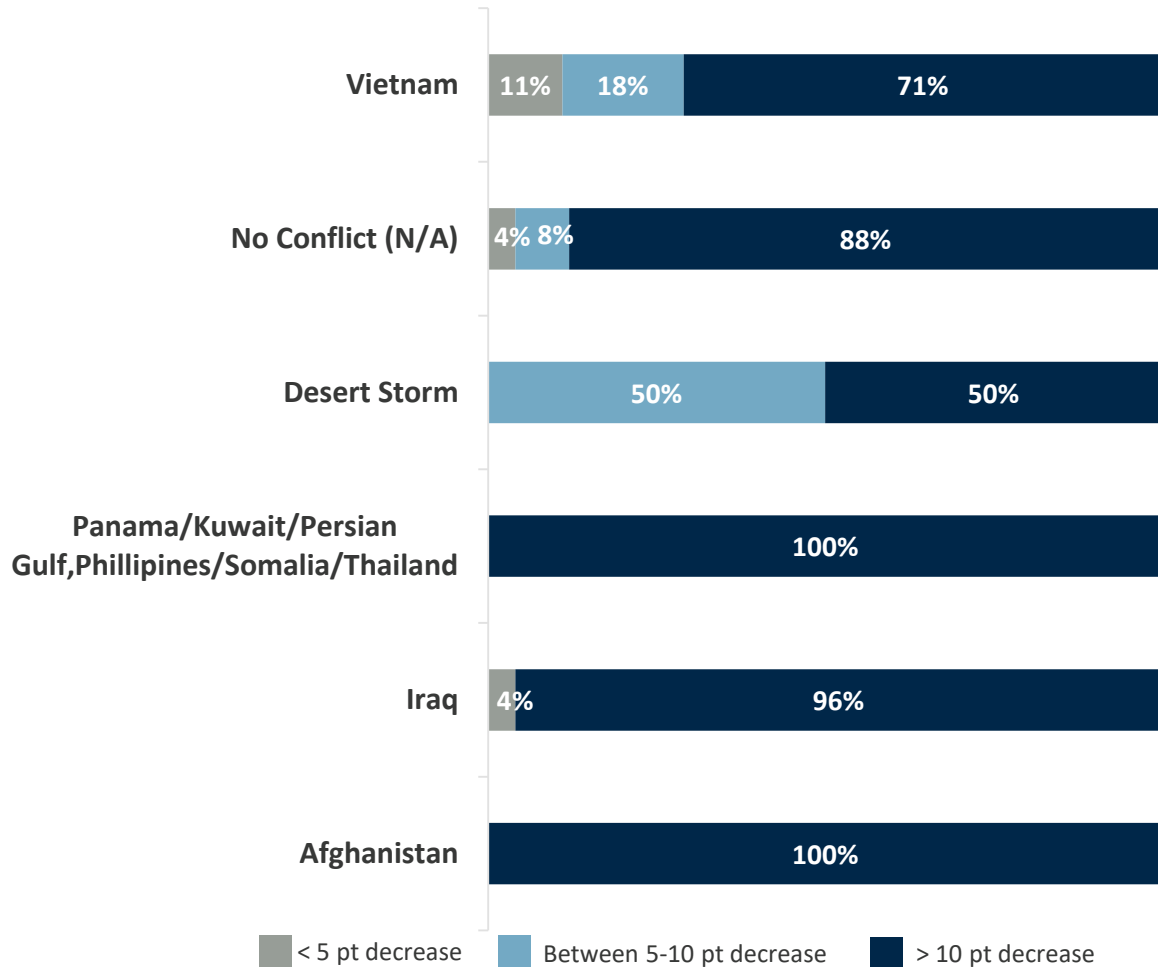


- 87% of females and 85% of males saw a clinically effective change in their PCL-5 score following the retreat indicating a reduction in PCL-5 score of 10 or greater points.
- 10% of females and 9% of males responded to the retreat therapy in a positive manner indicating a reduction in their PCL-5 score between 5-10 points.
- Only 3% of females and 6% of males had little to no response to the retreat indicating a change in their PCL-5 score of less than 5 points.

Segment	Total Participants	Pre Scores > 32 *	Post Scores > 32 *	Reduction in Symptom Suffering	Average Decrease in Score
Female	30	93%	23%	75%	-29
Male	67	82%	19%	76%	-28

# Market Segmentation Analysis

## By Conflict



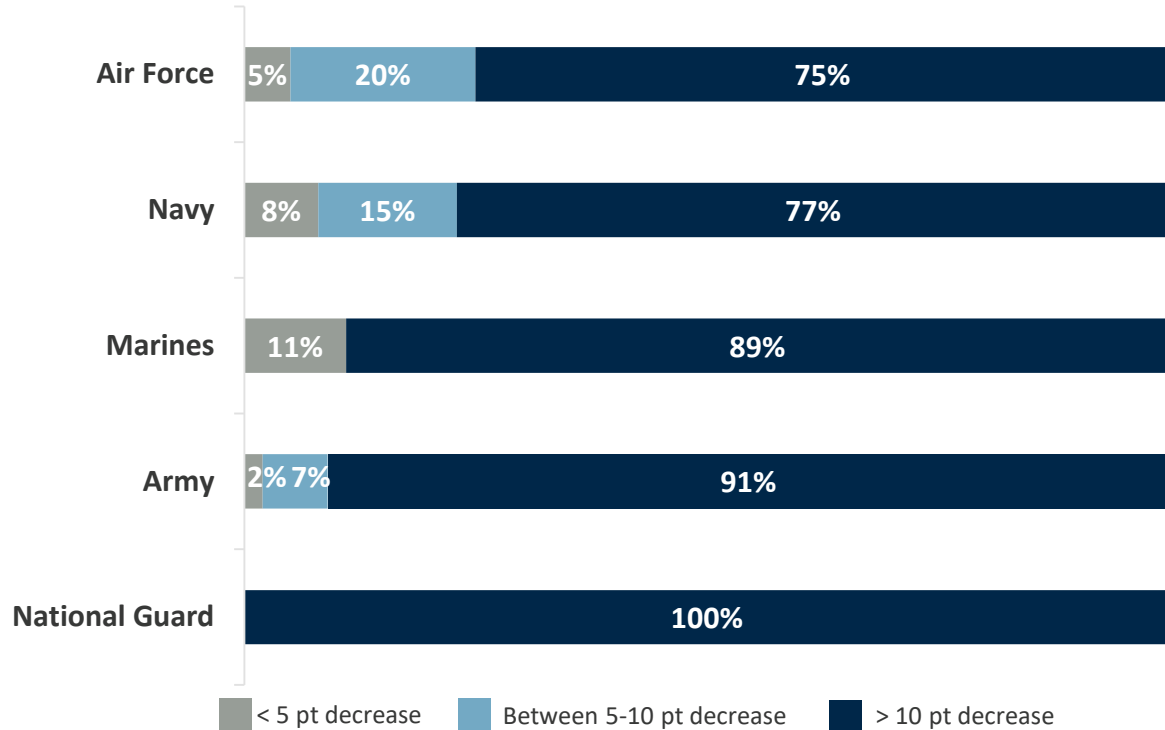
- On average, 84% of participants across segment sectors saw a clinically effective change in their PCL-5 score following the retreat indicating a reduction in PCL-5 score of 10 or greater points.
- On average, 25% of participants across segment sectors responded to the retreat therapy in a positive manner indicating a reduction in their PCL-5 score between 5-10 points.
- On average only 6% of participants across segment sectors had little to no response to the retreat indicating a change in their PCL-5 score of less than 5 points.

Segment	Total Participants	Pre Scores > 32 *	Post Scores > 32*	Reduction in Symptom Suffering	Average Decrease Score
Vietnam	28	64%	11%	83%	-23
No Conflict (n/a)	26	92%	27%	71%	-28
Desert Storm	4	100%	25%	75%	-24
Panama, Kuwait, etc...	6	83%	17%	80%	-36
Iraq	24	96%	21%	78%	-34
Afgh.	9	100%	33%	67%	-31



# Market Segmentation Analysis

## By Branch

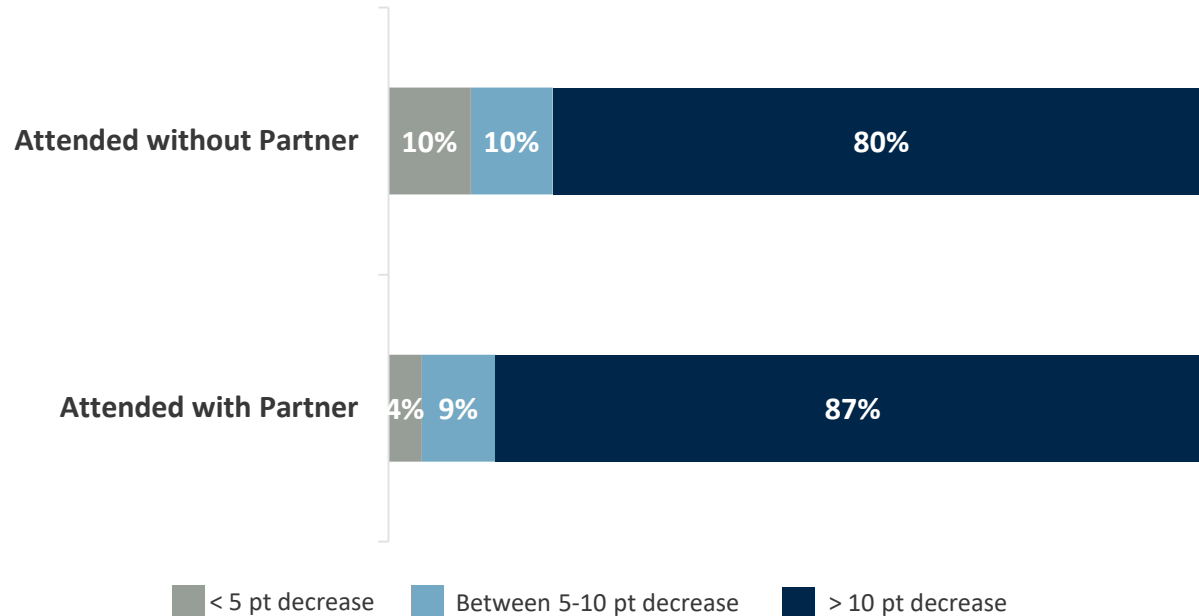


- On average, 86% of participants across segment sectors saw a clinically effective change in their PCL-5 score following the retreat indicating a reduction in PCL-5 score of 10 or greater points.
- On average, 14% of participants across segment sectors responded to the retreat therapy in a positive manner indicating a reduction in their PCL-5 score between 5-10 points.
- On average only 7% of participants across segment sectors had little to no response to the retreat indicating a change in their PCL-5 score of less than 5 points.

Segment	Total Participants	Pre Scores > 32*	Post Scores > 32*	Reduction in Symptom Suffering	Average Decrease PCL-5 Score
Air Force	20	75%	10%	87%	-25
Navy	13	85%	31%	64%	-27
Marines	18	89%	22%	75%	-29
Army	44	89%	20%	77%	-30
National Guard	2	100%	50%	50%	-23

# Market Segmentation Analysis

## By Partner

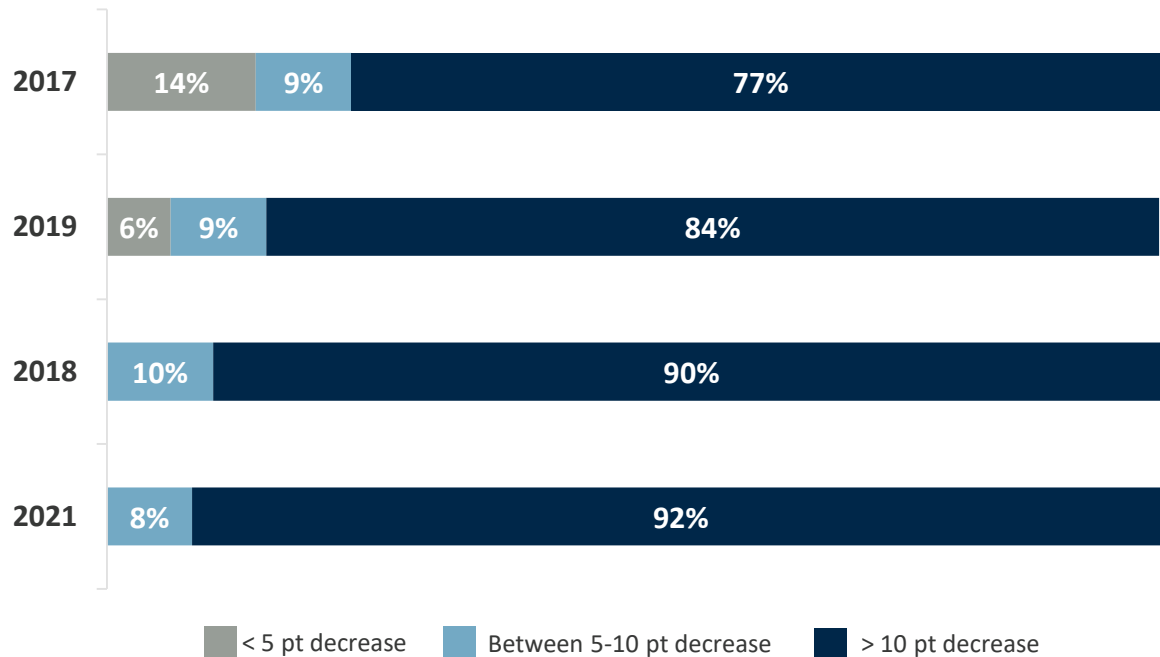


- 87% of participants who attended with a partner saw a clinically effective change in their PCL-5 score following the retreat compared with 80% of those who attended alone. This indicates a reduction in PCL-5 score of 10 or greater points.
- 9% of participants who attended with a partner responded to the retreat therapy in a positive manner compared to 10% who did not attend with a partner. This indicates a reduction in their PCL-5 score between 5-10 points.
- 4% of participants who attended with a partner had little to no response to the retreat compared to 10% who did not attend with a partner. This indicates a change in their PCL-5 score of less than 5 points.

Segment	Total Participants	Pre Scores > 32 *	Post Scores > 32 *	Reduction in Symptom Suffering	Average Decrease in Score
Without Partner	21	90%	14%	84%	-32
With Partner	76	84%	22%	73%	-28

# Market Segmentation Analysis

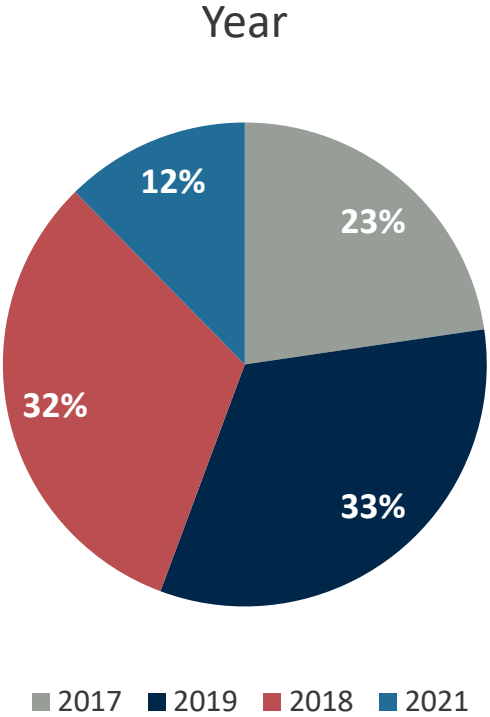
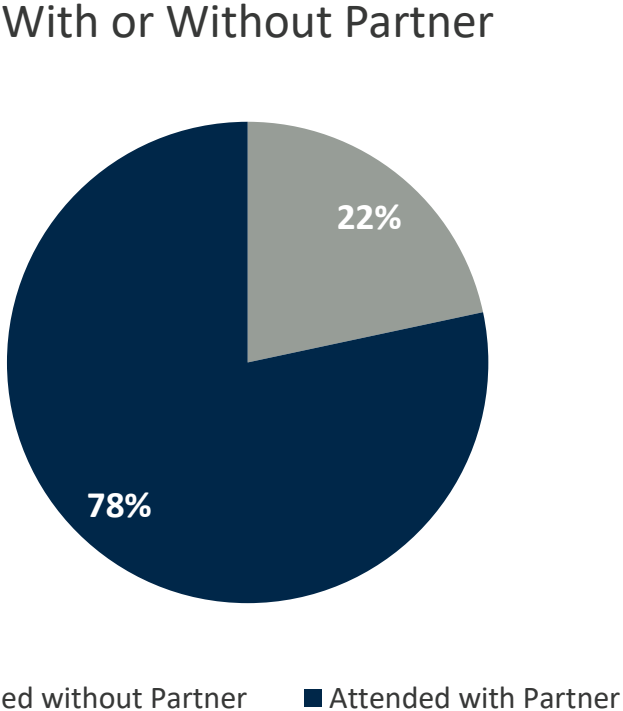
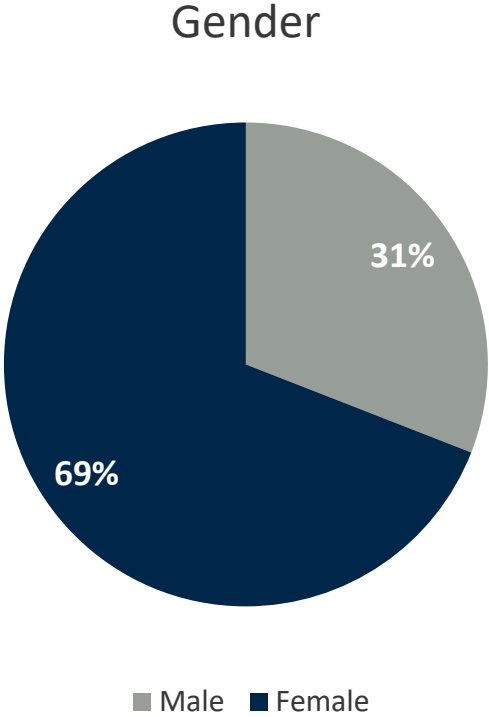
## By Year



- On average, 86% of participants across segment sectors saw a clinically effective change in their PCL-5 score following the retreat indicating a reduction in PCL-5 score of 10 or greater points.
- On average, 9% of participants across segment sectors responded to the retreat therapy in a positive manner indicating a reduction in their PCL-5 score between 5-10 points.
- On average only 10% of participants across segment sectors had little to no response to the retreat indicating a change in their PCL-5 score of less than 5 points.

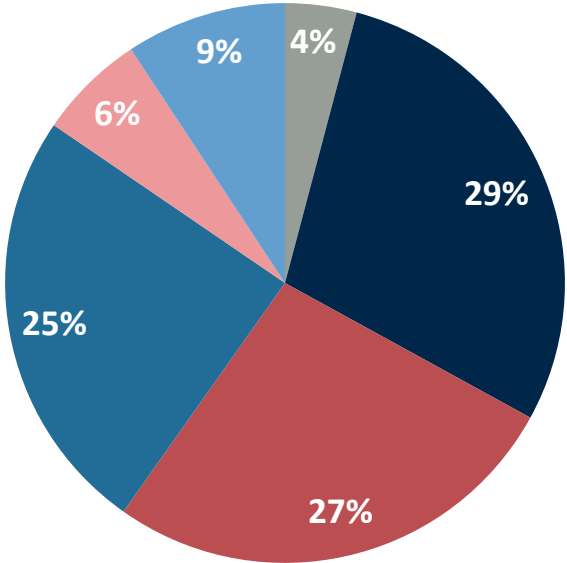
Segment	Total Participants	Pre Scores > 32*	Post Scores > 32 *	Reduction in Symptom Suffering	Average Decrease PCL-5 Score
2017	22	86%	32%	63%	-22
2019	32	84%	19%	78%	-29
2018	31	90%	13%	86%	-30
2021	12	75%	25%	67%	-34

# Participant Demographics



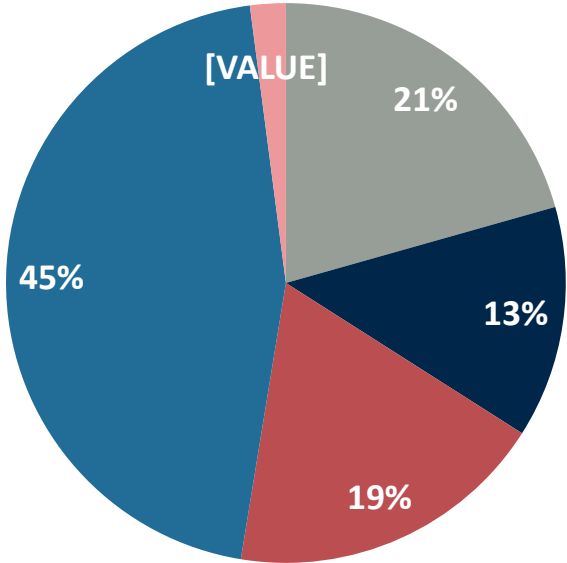
# Participant Demographics Continued

Conflict



■ Desert Storm ■ Vietnam ■ No Conflict ■ Iraq ■ Panama, Kuwait, etc... ■ Afgh.

Branch



■ Air Force ■ Navy ■ Marines ■ Army ■ National Guard

# Summary

## Conclusion

- After conducting high level analysis on the PCL-5 veteran test scores it can be determined that a majority of participants responded in a clinically significant manner to the variety of activities and therapies over the 7-day retreat conducted by NVWHC.
- This means that roughly 86% of participants reduced their PCL-5 test scores by a minimum of 10 points.
  - Even after adjusting for outliers a minimum of 83% of participants still responded in a clinically significant manner.
- In addition, another 9% of participants responded positively to the treatment. Meaning their test score decreased by a range of 5-10 points.
- Only 5% of participants did not respond to the treatment or saw an increase in their test scores following their completion of the NVWHC program.

## Recommendation

- Based on the results of this preliminary analysis, we believe NVWHC would be a viable candidate for new partnerships, continued fundraising, and expanding the breadth of their participants.
- We would, however, recommend NVWHC try to collect additional test scores one, three, and six months after a participant finishes the program. This would help to determine the long-term viability of the program's results, as current data for follow-up tests was sparse.