

**Rep. Comstock (Research & Technology Chairwoman), Rep. Lipinski (R&T Ranking Member), Rep. Weber (Energy Chairman), and Rep. Veasey (Energy Ranking Member): Thank you for the opportunity to present here to the Energy and Research and Technology committees today**

Project Hero is an organization that brings our Nation's Veterans and First Responders together through sports, activities, and community - helping them overcome challenges associated with their visible and invisible wounds. Being the catalyst for the adapted sports movement, Project Hero continues to be the industry leader. Dedicated research, including a Georgetown University study, of Project Hero's methods confirms that the work being carried out since its inception is changing and improving the lives of tens of thousands veterans, first responders and their families.

Our Mission is "Saving Lives by providing HOPE, RECOVERY, and RESILIENCE to America's Finest."

Project Hero's Impact:

- 62% of Project Hero participants reduce or eliminate prescription drug use; Opioids by 32% percent; Anti-Depressants by 62%
- PTSD-related stress attacks reduced by up to 83%
- Average annual cost savings for a Project Hero participant for VA mental health care, including prescription drugs, is \$9,761/yr.

## **The Situation**

A soon to be released VA report that reviewed 3,000+ suicides to evaluate cause and effect and recommended steps to improve care to our Veterans, provides data, to show why 20 veterans a day commit suicide and the risk factors, diagnoses, and family components that are the root causes of suicide:

The review found that the Diagnoses most common in all suicides are Depression, PTSD, Anxiety, and Alcohol use disorder

The average suicide had over 2 of the above

The top suicide risk factors are Pain, Access to firearms, Worsening of health status, Relationship problems, Hopelessness, Decline in physical ability

Over half of all suicides had no documented prior attempts noted in their medical record and there was a low prevalence identified as high risk at the time of death.

- 20 veteran suicides per day. Only 3 were receiving VA Mental Health Services. (2018 VA study)

Reasons:

1. Inconvenience of care

- Long wait times
- Paperwork
- Transportation

2. Primary barriers to seeking mental healthcare (self-Imposed)

A. Stigma

The top recommendation of the VA report was to come up with an enhanced suicide risk assessment and safety planning capability that addresses the complex care needs of veterans, utilizing technology and training, extending more into the community. There is a need for a more systematic assessment tool that can document risk.

The HEROTrak initiative solves this vital need for a technology-based objective solution for suicide prevention and mental health care. Currently, no PTSD tool exists with remote capabilities to complement ongoing treatment. Project Hero saw this deficiency and created and launched HEROTrak.

The HEROTrak smart tool will be a FDA approved device that will allow continuous monitoring and detection of PTSD triggers using physiological sensors and machine learning algorithms. It can measure frequency, severity, and duration of a stress event within 2-4 seconds.

The HEROTrak tool is a wearable health monitor developed with Texas A&M University (TAMU) and Dr. Sasangohar and tested exclusively at, Project Hero events to respond to and learn from user's physiological cues.



## **How much is peace of mind worth to you and your family?**

Goals:

- Prevent and eliminate suicide in military/veterans population.
- Provide long term focus on improving the overall readiness of the FORCE by providing better health & healthcare analytics.
- Provide support for survivors of sexual trauma and other mental health diagnoses.

The result will be better therapeutic outcomes at lower cost.

## **How much is it worth to you and your family to know help is seconds away?**

Using a combination of heart rate and heart rate variability monitoring, the PTSD alarm will identify triggers. The tool creates a personalized profile that monitors patterns and variability to infer PTSD triggers. If an episode is predicted, an alarm vibration goes off with a visual to prompt the user to seek help immediately with 4 options: self-resilience tools, connect to NoVetAlone peer to peer network including family, friends, or clinician, call VA crisis hotline, or call 911.

The device will pair with a smart phone and interface with a website to offer more features including direct connect to a peer, military command, or clinician either via phone or video as desired. The user will also be able to share info with peers in a social network they wish to create for their personal #NoVetAlone social support system.

This is just the beginning of combining the performance triad of activity, sleep, and calories burned with mental health to create a tool that can measure ones physical and mental state of mind at any given point.

### **How much is it worth to know the mental and physical readiness of the force?**

The device can best be utilized when a person first joins the military to create a baseline and then constantly and consistently collect data on the mental and physical health, recording any stress events and traumas during their service. The advantage is to maintain objective data and feedback and integrate this information with your electronic medical record. The biometric collective data can provide the medical clinician with a complete mental and physical health picture whenever the participant visits their health care provider and when they transition to the VA with their complete data history. The overall advantage is to have a more comprehensive, objective measurement with disability metrics that will lead to increased abilities and begin the care continuum when appropriate as they enter the VA or commercial healthcare system.

As this integrates into a broader health platform which connects military, VA and commercial together and targets the individual Servicemember or veteran in improving their overall mental, physical, and emotional wellbeing and health readiness.

### **How much is it worth to you and your family to know that you will not have to fight with the VA over your disability rating?**

## **Advantages**

### **Patient**

- Creates a way for a patient and their inner circle (family, friends, caregivers) to understand the environment and surroundings that causes stress episodes in their life and use information to mitigate future events.
- Patient centered design with 24/7 support network (medical, resiliency, peer to peer) for a PTSD episode. All participants in clinical trial favored the tool and expressed strong interest in using one.
- Accurate information on my mental and physical state of mind.
- Peer to Peer support to provide motivation, feedback, and knowing that I am not alone. NoVetAlone
- The device will pair with a smart phone and interface with a website to offer more features including direct connect to a peer, military command, or clinician either via phone or video as desired. As technology improves this device capability will improve.

### **Clinician**

- Complete mental and physical health picture of their patient.
- More comprehensive measurement with disability metrics, which lead to increased abilities and begin more informed care continuum when they enter VA system.

### **DoD/VA**

- Create a baseline and then constantly and consistently collect data on the mental and physical health, recording any incidents, episodes, and traumas during their service. Takes the guess work and stress out of VA disability ratings!!

- Maintain objective data and feedback on overall readiness and integrate this information with the electronic medical record.
- Create a healthier, stronger wellness, recovery and resilience path with active duty/VA medical services support.