



Mobile Apps Support Mental Health at the Department of Defense

With the mission of ensuring that all soldiers are medically ready to protect our nation by providing access to cutting-edge healthcare, the Defense Health Agency (DHA) strives to exceed the health support service for our soldiers beyond standard physicals. DHA's Web and Mobile and Technologies (WMT) department addresses mental health needs with proactive and easily accessible services with intuitive applications. The applications allow DHA to treat anxiety, depression, and post-traumatic stress disorder (PTSD) for defense users and their families.

These digital solutions showcase the agency's ability to develop and deliver mobile applications, putting the intersection of health care and technology at the forefront of high quality care centered on patients.

Challenge

The Usability Lab of WMT identified the need for digital health care solutions based on input from service members, veterans, beneficiaries, and health care providers. Development of mobile app software and program management required:

Services Provided:



- Supporting WMT with 21 technology experts to guide the program operation and deliverables
- Delivering mental health applications that leverage technologies in virtual reality, machine learning, blockchain, and cloud development
- Managing security and compliance to protect user data

Success Achieved:



- More than two million downloads of the Breathe2Relax and Virtual Hope Box applications since 2011
- Breathe2Relax users total more than 21,700 on Android and iOS
- Virtual Hope Box users total more than 40,300 on Android and iOS

- Detailed consideration and analysis of user behavior through extensive testing.
- Thorough analysis of strengths, pain points, and natural interactions with the health care application products.
- Precise identification of the latest technologies, including virtual reality, machine learning, blockchain, and cloud development, to ensure leading-edge software design.
- Expert implementation of security and compliance infrastructure to protect users' sensitive health data.

Approach

WMT turned to Maximus, a trusted partner to federal agencies. Much more than technology consultants, our team is well established within the WMT program and invested in its critical mission to serve our nation's service members and their families. The team's capabilities include software development, project management, security, and user experience testing. Maximus supports the WMT solutions with:

- Breathe2Relax (B2R) – a portable stress management tool that provides detailed information on the effects of stress on the body and practice exercises to help users learn the stress management skill called diaphragmatic breathing.
- The Virtual Hope Box (VHB) – an application designed for use by patients and their behavioral health providers as an accessory to treatment with simple coping, relaxation, distraction, and positive thinking tools.

Applications developed in collaboration with psychologists at Walter Reed National Military Medical Center include a virtual immersion therapy solution to treat soldiers with PTSD. A second application exposes caregivers to PTSD symptoms so they can understand what their loved ones are going through.

Results

The WMT has distributed a wealth of critical mental health tools to a broad population of service members and civilians. With more than 10 million downloads of its applications, the WMT provides a breadth of resources that users can access. These range from coping mechanisms to daily habit-building exercises that improve mental wellbeing. For the WMT, the delivery of this digital capability is the result of its connection to the mission of patient care. At the end of the day, we're all working toward the one goal of keeping service members healthy.

We can empower you to innovate with agility and scale, delivering impactful outcomes and exceptional customer experiences. Learn more at [maximus.com/defense](https://www.maximus.com/defense).

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