

“Force Readiness” is defined by CJCS as the readiness of a Branch of Service within its established force structure, as measured by its ability to “station, control, man, equip, replenish, modernize, and train its unit forces in peacetime, while concurrently planning to mobilize, deploy, employ, and sustain them in war.” (source: *2017-2018 How the Army Runs – Senior Leader Reference Handbook*). Readiness at the unit level focuses on broader functional areas and is a function of the unit commander’s ability to integrate and synchronize combat and support forces to execute assigned missions. Force readiness is dynamic, encompasses many functions, and is influenced by many factors, including the status of personnel, equipment, and war reserves.

Personnel Readiness, as a function of Force Readiness, is a vital component of a unit’s overall ability to meet its mission requirements. Regarding the state of Personnel Readiness in this decade, Marine Corps Gen. Joe Dunford, the chairman of the Joint Chiefs of Staff, told senators recently that “...fifteen years of war have taken a toll on our people... Many of our men and women continue to deploy as much as they are home.” This over-extension and over-exertion of our military personnel in addition to the real impacts of chronic stress and combat has put severe strain on our nation’s greatest assets – the soldier, sailor, marine, airman, or coast guardsman – and has compromised a commander’s ability to accurately and objectively reflect his unit’s personnel readiness; the impacts of war and stress often being covered up with a “can-do” attitude, an esprit de corps, or a promotion/success minded focus where no one wants to self-report a psychological, emotional or mental stressor of mental exhaustion, stress, or real trauma, and as such personnel readiness becomes more of a quantitative measure - number of personnel assigned in proper jobs - rather than a qualitative one - are those who are assigned in those jobs emotionally and psychologically able to perform the job. Personnel readiness in the physical can be tested, observed, counted, measured whereas personnel readiness in the psychological, mental and emotional is personal and up until now had no way of being objectively measured.

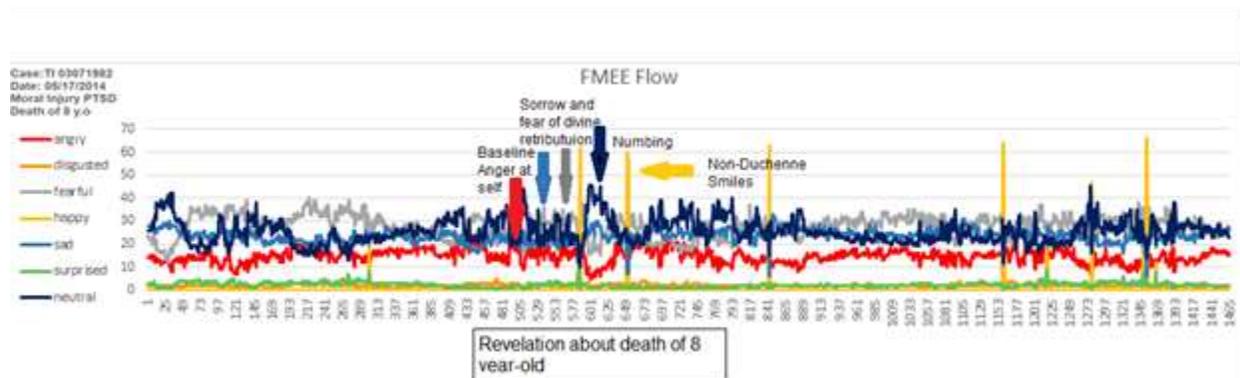
In 2012 Future Life, Inc was founded with the mission of bringing this objective measurement to behavioral health in order to confront the issue that suppressed or hidden stress and invisible trauma is having on the resiliency of our service men, women and veterans. With active duty and veteran suicides occurring at an unprecedented rate, families being destroyed, and operation units admitting that they are not “ready” to deploy - all because of the toll of decades of war - a team of behavioral health experts and software engineers created a tool that measures and maps the Human Emotional Footprint using FMEE (Facial Micro-Expressions of Emotion) analysis to objectively measure Human Emotional Responses and Actions. We call this technology Face2Face™.

From a clinical perspective Face2Face™ is a tool that provides a biometric measure and analytical “window” into a person’s emotional and psychological state of being. Face2Face™ automatically analyzes the veteran's FMEE's (facial micro-expressions of emotion occurring in less than 1/15 of a second) and applies this data to specially designed algorithms, watching for signs of PTSD and other mental illnesses. By recording and analyzing the service member or veteran's emotional response in real time, as well as incorporating data from past sessions, Face2Face™ can be used as a tool to proactively assess the emotional state of the patient which can then be used to properly not only diagnose a potential condition but also apply proper treatment. This can be measured in one sitting or mapped over time to give the clinician a better understanding of the underlying issues and thus provide more focused course of action.

To see how this works, take for example the actual case of a deployed Marine who was experiencing symptoms of PTSD (sleeplessness, irritability, depression, fear) who utilized the Face2Face™ technology, and along with his clinician was able to recognize and identify his underlying triggers causing his emotional pain and together they were able to administer and execute a more complete course of treatment getting the Marine back in the force and able to contribute to his unit’s mission faster and more effectively.

This Marine was deployed in Bucharest, Romania after a deployment to Afghanistan at the time and was suffering from insomnia and unshakable feelings that something bad was going to happen to his 8-year-old son or wife. This fear and anxiety left him no peace, which prevented him from being 100% effective in his mission assigned by his unit commander. When interviewed, this Lance Corporal could think of no “specific” reason why he would be having these feelings of anxiety, jealousy, fear, worry and insomnia. He had seen some brutal combat and lost members of his unit; however he felt like he was “managing” or “compartmentalizing” these emotions in order to fulfill his obligation to his unit and be successful in his career. Like many service members with PTSD, he had received several short-term fixes for his symptoms, mostly in the form of medication or broad brush resiliency and PTSD awareness training.

This Marine requested a Face2Face interview through a FutureLife network partner “Invisible Wounds” and he was provided treatment utilizing telehealth technology. He produced a Face2Face™ profile that matched the story of his current symptoms; his FMEEs tracked “normally” for everything expected of a combat decorated soldier, except for his answer to one question: “Have you ever been in a situation in which you felt responsible for innocent civilian casualties?” to which he answered “Yes...but it’s just what happens in war.” At that point his FMEE Flow showed a cluster of intense activity as seen in the graph:



Because of this activity as revealed by this Marine’s unconscious processing of the question about civilian casualties in war, the clinician was able to then follow up with a more detailed inquiry. The Marine told a story about how he was manning a checkpoint during an intense period of operations and a truck full of men approached waiving and yelling. He and his fellow Marines kept them at bay until with their weapons drawn until they could determine that their intent was to try and save an 8 year old boy. By the time medical help arrived, the boy had died in this Marine’s arms.

This hardened warrior had suffered a moral injury by not being able to save this child. On a deeper level and after more questioning, the clinician was able to determine that this Marine now felt unworthy of a loving home and wife and felt quite possibly that if he returned to his family his son would die in some form of divine retribution. Because the clinician and the Marine together were able to identify at least one trigger for this current source of anxiety, specifically utilizing Face2Face™ technology as a tool for both the therapist and the Marine, they were able to better target treatment methods and therapies to get the Marine fully operational sooner.

This example of Face2Face shows how technology can be a tool used for assisting in creating a better line of questioning and in applying more focused treatment, in this case to assist an individual in order to help them grow their resiliency so they can be more effective for their units faster. More than this, in order to get the most out of Face2Face as it pertains to Force Readiness, clinicians and unit commanders need to have the data available longitudinally. This longitudinal assessment of members of the Armed Forces at various points from enlistment through their return to civilian life would be a positive enhancement to Force Readiness because the technology can be used by clinicians to look for changes from an individual's baseline - or last evaluation - to see if they are experiencing new or worsening conditions, and if so, how are treatment methods – if any – being applied, are they working, and does the individual need more assistance and when viewed in the aggregate can give commanders a true window into their units personnel readiness that doesn't currently exist.

(PARAGRAPH ON HOW/WHERE THIS WOULD BE EMPLOYED LONGITUDINALLY)

Force Readiness, true personnel readiness and thus unit readiness requires optimal physical and psychological fitness from every service member; and any unrecognized, unadmitted, or untreated posttraumatic stress disorder (PTSD), depression, or other psychological malady, even at sub-clinical levels, can have a significant negative impact on how effective personnel and thus units can be when deployed. Feedback from Face2Face™ serves as an accurate and reliable measure of unbiased triggers, and when applied over time and aggregately across an entire unit can provide a more objective measure of personnel mission-readiness than what's currently available, giving Commanders unbiased data of every soldier's psychological strengths and weaknesses, morale, motivation level, temperament, and emotional resilience from enlistment to separation which can provide a window into the "wholeness" (fit for duty / readiness) status of their command in an upfront view that allows for more proactive measures to be taking so the unit can be deployed on time, healthy and effective.