

## Problem Statement

DoD recognizes the heavy cost it's paying for the physical and mental injuries (both acute and chronic) suffered by our nation's warfighters. Professional and collegiate athletics are today using technology and data to prevent injuries and improve the health and human performance of their athletes. DoD must begin to use the valuable data it collects in order to reduce injuries and costs of treatment.

- Individual health, fitness, and performance data are stored in silos and unavailable to the warfighter, providers, and leadership. There is no single database.
- The security concerns of private data, the integration of real-time data from fitness bands / watches, and current health metrics like heartrate, weight, fitness scores, need a common data platform in order to guide intervention.

## Impact of a Single Secure Data Platform

SPEAR is an Enterprise health and human performance PaaS being currently used by commercial and special military customers. SPEAR meets or exceeds the security and data management requirements of the .MIL and .COM environment to support real-time readiness.

SPEAR's impact on health & human performance includes:

- A seamless ingestion of data from commercial devices and external healthcare platforms into the secure .MIL ecosystem
- A single platform enabling integration with legacy and emerging EHR systems (MHS Genesis, DES, DRRS MEDPROS).
- Embedded and integrated Artificial Intelligence and Machine Learning insights providing actionable intelligence analytics.
- Center Hub Architecture within a SPEAR-owned Azure IL5 enclave
- IL5 secure data distribution, managed via Role-Based Access Controls (RBAC), available via mobile app and dash-boards.
- Red, Yellow, Green daily "warning lights" for risk of injury and readiness to undergo strain (ques leadership when to push and how hard to push versus when to recover).

## Solution – A Next Generation Data Platform

Optimizing human health and performance requires delivering precise and targeted insight to the **warfighter**, **provider**, and **leadership** from a centralized platform capable of aggregating information while meeting the security and scale needs of the .mil environment.

## The SPEAR Data Platform enables:

- Secure/Impact Level 5 (IL5) integration and application of various data sources bridging .COM and .MIL.
- Technological infrastructure to support the physical infrastructures that are currently in place.
- A single platform where the warfighter lifecycle can be coordinated and maintained; from recruit to veteran.

## Dual Use and Commercialization



Contract: Naval Special Warfare Command  
Operational 5-year IDIQ contract to license SPEAR



AFRL/AFWERX SBIR Phase II  
Luke AFB 56<sup>th</sup> Operational Medical Wing



Henry Jackson Foundation/CHAMP  
Mobile App National Guard



Bundled Artificial Intelligence Solution for  
Self-Insured Employers (MSKi and  
Fraud/Waste/Abuse)