



Serving the Department of  
Defense in its Pursuit of Health,  
Performance, and Efficiency

For well over three decades, Leidos has been providing the Department of Defense (DOD) with solutions that address many of its most critical and complex health and human performance needs. Whether it's safeguarding the health and wellness of Service members, veterans and their families; supporting warfighters relied on to perform at their peak; or developing high-impact IT systems that deliver state-of-the-art function and efficiency to healthcare operations, the Leidos Health team stands ready to deliver.

Here's how we're supporting the DOD in its health- and performance-related missions.

## **DOD Healthcare Management System Modernization**

### **Program Overview**

The DOD Healthcare Management System Modernization (DHMSM) program is a \$4.6B initiative to deliver a state-of-the-market electronic health record (EHR) system to the Military Health System (MHS). The Leidos Partnership for Defense Health (LPDH) was awarded the contract in 2015 to acquire, test, and deliver the new EHR, known in DOD as MHS GENESIS. The new EHR is designed to provide enhanced, secure technology to safely manage patient information in ways that will improve health outcomes, advance medicine, and increase healthcare efficiencies for the military health system.

### **Challenge**

Faced with an aging and disparate legacy health record system, DHMSM's mission was to implement a fully integrated, commercial solution that would provide a single, common record for the MHS. While every healthcare system is addressing quality, experience, and cost, DOD is unique in that it must deliver these objectives within the DOD security environment, at a global scale, while supporting the Defense Health Agency (DHA) vision of a medically ready force and a ready medical force.

### **Approach**

The MHS GENESIS system, developed by the Leidos Partnership for Defense Health, provides a single, common record of medical and dental information, connecting healthcare teams across the DOD, Department of Veteran Affairs (VA), DHA, and private sector providers. These advanced capabilities eliminate the need for data sharing, ensuring the system meets the standards of a complex security environment, at global scale, while meeting the highest standards of quality and cost.

### **Results**

MHS GENESIS is being deployed by geographic region to all military treatment facilities (MTF) in a total of 23 waves by the end of calendar year 2023. The system is currently live and operational at more than 20 MTF Commands in Alaska, California, Idaho, and Nevada.



## Warfighter Program

### Program Overview

The success of the U.S. military depends on Service members' ability to:

- ▶ quickly perform demanding tasks under tense conditions
- ▶ maintain their physical and psychological health while they do it,
- ▶ recover as quickly and fully as possible afterwards.

To find new ways to help military personnel with less risk to their health, Leidos provides research and development support services for the Warfighter Performance Department at the Naval Health Research Center in San Diego. The work involves conducting investigative studies of physiology, psychology, training protocols, and equipment to develop new strategies for improving Service member performance in challenging situations with fewer injuries.

### Challenge

Improving warfighter performance, safety, and resilience requires new, evidence-based approaches to identifying best practices in training, mission, and post-mission environments, and to implementing those practices throughout the service lifecycle. For example, Naval Special Warfare personnel in SEAL training programs occasionally experience heat illness or heat stress injury during the extremely demanding exercises and tests. In the past, those trainees were not allowed to return to the program after recovery, resulting in a significant loss of potential personpower in the SEAL's ranks and a lack of return on the substantial investment in each trainee. But additional data could indicate whether many of those trainees might actually safely return to the program.

### Approach

Drawing on its decades of experience in research and development, Leidos plans, designs, coordinates, and executes experimental protocols that can provide the data needed to make sound decisions about improving Service member performance and injury resilience. Among the many areas Leidos is addressing with warfighter studies are:

- ▶ the impact of carried loads
- ▶ changes in cognitive function after stress and injury
- ▶ the toll of fatigue and insufficient sleep
- ▶ care strategies for wounded warriors
- ▶ resilience to exposure to heat and cold
- ▶ best routine practices for health and wellness.

In the case of SEAL training, for example, teaming with the Navy, Leidos developed a heat-tolerance test to evaluate the feasibility of returning injured trainees to the program.

### Results

To provide insight into whether SEAL trainees who experienced heat illness or stress injury might safely resume training, Leidos conducted a study in which 145 tests were performed on 91 warfighters. Seventy-five of them were deemed fit to return to training, and 19 of those trainees went on to become SEALs, representing a return on investment of \$27 million in training costs.



## Accessions Information Environment Support Services

### Program Overview

The Accessions Information Environment (AIE) is the U.S. Army's planned new information technology platform, which will provide a modernized, integrated, standardized, and enterprise-wide set of information systems and business practices for many of the Army's key functions. One of the components of the AIE is intended to support the Army's activities in the recruitment and processing of applicants for enlistment. Leidos is a subcontractor for that work of the project, providing a number of IT support services.

### Challenge

The existing standalone information system that the Army relies on for supporting its recruitment and applicant processing efforts is out of date, leaving it relatively difficult to access and use, costly to maintain, and unable to easily exchange data with other Army information systems. The goal of the AIE recruitment-component project is to replace that system with a fully modernized one that provides more functionality and an intuitive interface. The new system will also share an underlying architecture with—and provide close integration with—the other components of the AIE, so that much of the Army's data will become unified and securely accessible. The results will support the ability of Army recruiters and leadership to gather, update, and usefully apply recruitment and applicant data, along with other relevant Army data, for more efficient operations and better, faster decision-making at every stage of the recruitment and applicant-enlistment process.

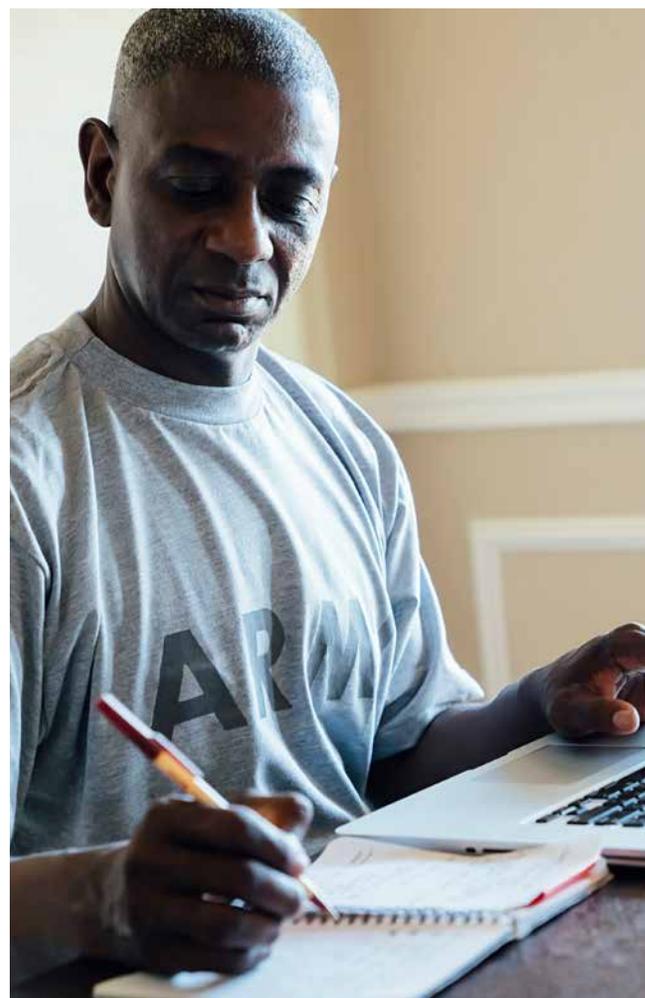
### Approach

Similarly to the other components of the AIE system, the recruiting component is being built with an eye to adhering to a standardized architecture and automated business

practices, facilitating its integration with all AIE components. The design is intended to maximize the ease and functionality of data entry, discovery, sharing, analytics, and reporting. Leidos is applying its extensive expertise and experience systems integration to help develop and set up an Operational Support Center dedicated to providing agile customer support for those working with the AIE recruiting system.

### Results

Though the development of the AIE system is still in the early stages, Leidos has already provided substantial support in system testing, training-curriculum development, data migration, interface design, and network operations, as well as in establishing and operating a help desk.



# Navy Submarine Medical Research

## Program Overview

Leidos provides research and development support by conducting scientific and clinical investigations related to the health, wellness, and performance of Naval submariner personnel in operational and non-operational settings, in order to screen for, prevent, and mitigate a unique set of stressors.

## Challenge

Naval personnel deployed on submarines are subject to a range of unique challenges to their physical and psychological well-being, which may impact their ability to perform demanding tasks. As a result, many submariners are ultimately identified as poorly suited for deployment, but usually only after the Navy has made a significant investment in their education and training, including the completion of submarine school. Submarine candidates undergo a screening process, but historically only 10% of the submariners removed from the program were identified early on by the screening. Thus the need to better understand the medical, psychological, physiological, and other concerns that can arise among submariners, and to determine the most effective ways to screen for and respond to these difficulties.

## Approach

Leidos has been designing, developing, and performing a broad range of biomedical and psychological investigations of submariner health, wellness, and function, encompassing a number of different disciplines. One key effort has been to modernize the current psychological testing instruments intended to measure the risk of attrition of submarine personnel, including adapting the instruments to generational changes and the integration of men and women in submarine crews. The effort also involves applying psychometric tools to

analyze and verify the accuracy of various test components. Additional elements of submariner service addressed by the research are physical and psychological wellness, human factors in equipment and environment, and undersea warfighter performance and resilience.

## Results

Outcomes of the research into more effective screening of submariners include:

- ▶ implementation of a formal job analysis of submariner roles, leading to new test items that better discriminate for psychological fitness
- ▶ creation of a new neurological assessment tool designed to mitigate unplanned losses and identify submariners who may ultimately not be suited or ideal for duty
- ▶ expansion of screening to encompass enlisted and officer trainees
- ▶ identification of non-submarine-fit sailors suitable for reassignment to non-submarine duties rather than separation from the Navy, to minimize loss of warfighter capacity.

The program has also produced new insights into and protocols for submarine medicine, operational and ship safety, hearing conservation, underwater bioeffects, informational display and processing, submarine escape and rescue, and atmospheric safety.



## Adolescent Support and Counseling Services

### Program Overview

For more than 30 years, Leidos has been providing substance abuse counseling and other behavioral health services to the families of military Service members deployed in various global locations.

### Challenge

Military personnel deployed outside the U.S. typically bring their families with them. But the challenges of living abroad, combined with other stresses military families often experience, can leave family members—and particularly adolescents—vulnerable to substance abuse and other behavioral health problems. When those problems lead to a family member running into trouble with local authorities or standards of conduct, the results can mar the records of Service members, and force reassignments back to the U.S., at a high cost in terms of dollars, careers, and force readiness. Behavioral health services can prevent and treat these problems, but family members living overseas may lack good options for accessing them.

### Approach

The Leidos Adolescent Support and Counseling Services (ASACS) program has embedded trained behavioral health counselors in place at more than 65 military installations in 10 countries, plus Alaska and Hawaii. The counselors are dedicated to treating free of charge all adolescent and other family members of military service personnel who hold a military ID card and who are eligible for TriCare services. While adolescent substance abuse treatment remains a special focus, the program offers a comprehensive set of services for behavioral health-related prevention, education, identification and referral, and for other non-medical counseling services.

### Results

Relying on well-established Feedback Informed Therapy techniques to quantify outcomes, ASACS has demonstrated the efficiency and effectiveness of its efforts in numerous ways. For example, a larger percentage of ASACS client populations experience improvement than similar non-ASACS populations, and clients on average experience higher levels of improvement than non-clients. Additionally, the ASACS client population hasn't experienced a single death by suicide since the inception of the program.

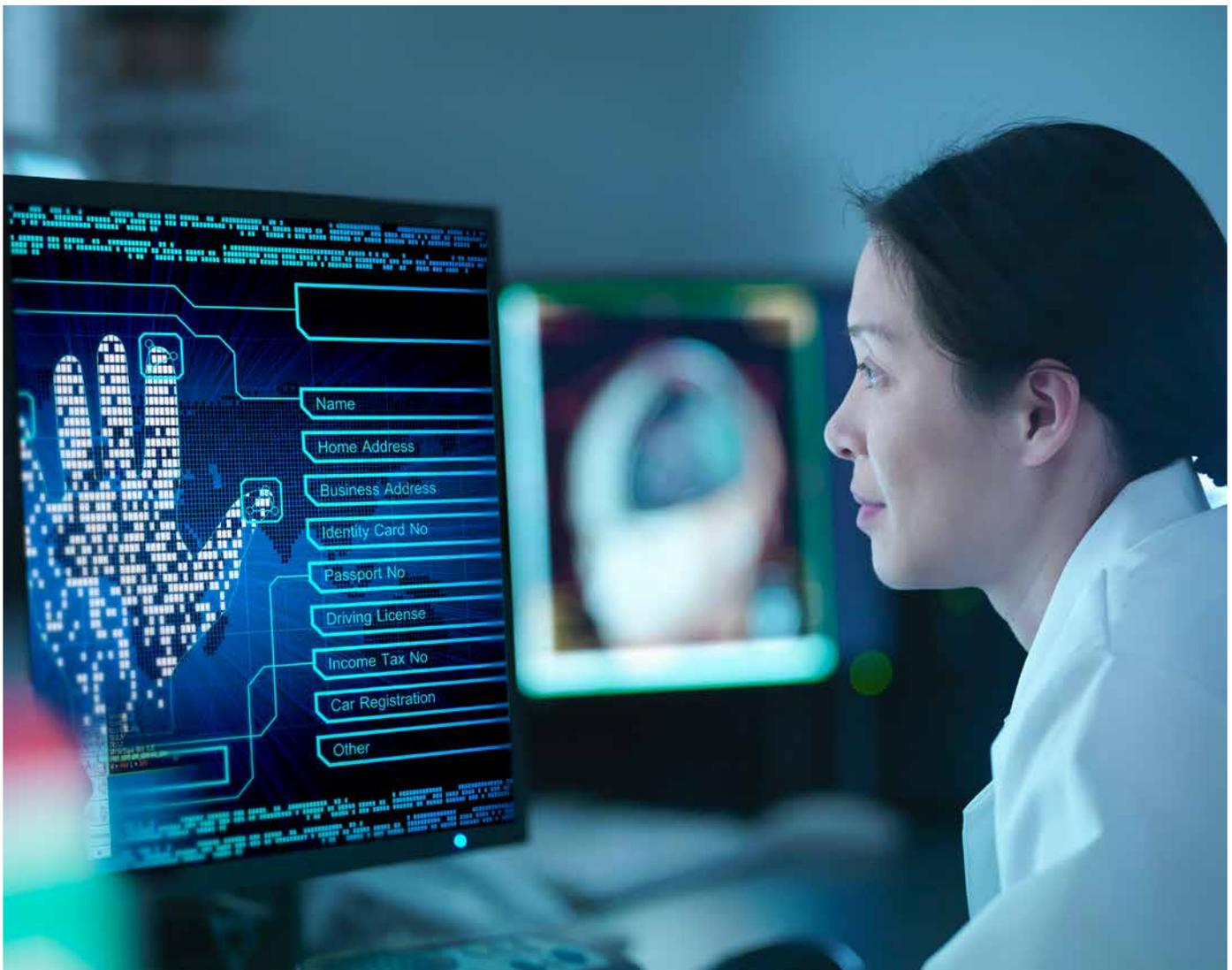


## Proven Success

At Leidos, we pride ourselves on creating solutions to complex, technically challenging problems of national and global importance. We discover new ways to fight cancer, defend our nation's most critical cyber networks against attack, and develop and manage leading-edge IT solutions for the DOD. We also find new approaches to conducting, analyzing, and applying biobehavioral research to advance military readiness, improve warfighter performance, and protect the health and wellness of Service members, veterans, and their families.

## Why Partner with Leidos

As a leading provider of data-driven, value-based solutions for the U.S. government, we understand our customers and their missions. By bringing our expertise in biobehavioral research, clinical care, support services, and IT to bear, we deliver solutions that provide immediate benefits aimed at our customers' most important needs. Our multi-domain knowledge in the underlying science enables us to take a disciplined, efficient, evidence-based approach that helps ensure the success of our integrated solutions.



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