



Release No. 21-10-27
October 27, 2021

Contact: Sarah Marshall, Office of
External Affairs

'KSA' metrics will improve military surgeons' readiness

Bethesda, Md. – As the intensity of fighting in current conflicts has declined over the last several years, military surgeons have been challenged to maintain their skills for treating combat casualties. In response, the Knowledge, Skills and Abilities (KSA) Clinical Readiness Program was developed by the Uniformed Services University (USU) in collaboration with the American College of Surgeons (ACS) to measure clinical readiness and ensure quality care throughout the Military Health System (MHS). A new study, published in *JAMA Surgery*, used the KSA program to explore trends, and its findings could help inform changes to patient workflow to increase surgical workloads and ultimately enhance readiness.

The study, “Analysis of Surgical Volume in Military Medical Treatment Facilities and Clinical Combat Readiness of U.S. Military Surgeons,” was published Oct. 27 and led by Harvard Medical School’s Dr. Michael Dalton, first author, and Dr. Joel Weissman, senior author. The study was also co-authored by Dr. Eric Elster, dean of USU’s School of Medicine, and Dr. Kyle Remick, trauma surgeon and associate chair for operations in USU’s Department of Surgery.

The military surgical community and the ACS established a list of 487 unique KSAs relevant to general surgeons in the deployed setting, as previously described in several recent publications in *JAMA Surgery*. More than 2,000 codes were assigned to each of these KSAs, representing the importance and relevance of skills that would be similar to those required of a deployed surgeon on the front lines. As part of this KSA metric, they established a readiness threshold to determine combat readiness. For general surgeons, this threshold was considered to be performing at the 70th percentile of surgical volume, compared to KSA points performed by deployed surgical teams during the busiest year (2011) of the recent conflicts.

Using these KSA metrics, this study looked at 147 medical treatment facilities --- both military and civilian – and the general surgery workload between fiscal years 2015 and 2019. They found that military general surgeons who met the KSA metric readiness threshold decreased from 16.7 percent in 2015, to 10.1 percent in 2019. While the KSA metric points and surgical volume in military hospitals have been decreasing since 2015, both measures also increased in civilian facilities.

Ultimately, these findings demonstrate that KSA metrics are vital to measuring military surgeons’ individual clinical skills readiness, while also providing data to leadership that can lead to increasing clinical readiness-generating workload within the MHS, according to Remick.

“We took advantage of a unique method developed by the military to convert domestic surgeries into the knowledge, skills, and attributes necessary for casualty care readiness,” said Elster. “This will be

impactful for us and will support our effort to move the ball down the field for casualty care readiness. It's also essential that we have such a method to measure the individual clinical readiness of our critical wartime skill specialties and be able to implement a solution to sustain clinical readiness."

###

About the Uniformed Services University of the Health Sciences: The Uniformed Services University of the Health Sciences, founded by an act of Congress in 1972, is the nation's federal health sciences university and the academic heart of the Military Health System. USU students are primarily active-duty uniformed officers in the Army, Navy, Air Force and Public Health Service who receive specialized education in tropical and infectious diseases, TBI and PTSD, disaster response and humanitarian assistance, global health, and acute trauma care. USU also has graduate programs in oral biology, biomedical sciences and public health committed to excellence in research. The University's research program covers a wide range of areas important to both the military and public health. For more information about USU and its programs, visit www.usuhs.edu.