



Mayo Clinic Department of Defense Medical Research Office Trauma Surgeon and retired Air Force colonel improves transition between phases of care

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When a soldier flies from Kandahar International Airport in Afghanistan to the Craig Joint Theater Hospital on Bagram Air Base in Afghanistan for medical care, his or her journey is almost equidistant to a Mayo Clinic Health System patient's flight from the level 3 trauma center at Mayo Clinic Health System in Mankato, Minnesota, to the level 2 center at Mayo Clinic Health System in Eau Claire, Wisconsin. For Donald Jenkins, M.D., Surgery, this isn't some coincidental similarity in otherwise vastly different climates and cultures. The retired U.S. Air Force (USAF) colonel is always looking for ways to apply what he learned from his military service to his work as medical director of Mayo Clinic's trauma center.

"Our patients from Minnesota, Wisconsin, Iowa and South Dakota come to Mayo facilities for different levels of trauma care," says Dr. Jenkins. "We can't compress the distances, so we work for better solutions and practice guidelines for when and where patients need to be transferred."

Coordination of care across great distances was one of Dr. Jenkins' many fortes as a USAF surgeon. He was instrumental in founding the military's first trauma system, the Joint Theater Trauma System, with the vision that "every soldier, marine, sailor or airman injured on the battlefield ... has the optimal chance for survival and maximal potential for functional recovery." A trauma system organizes and coordinates efforts to deliver a full range of trauma care for a population. It determines where the farmer injured in the cornfield and the soldier injured on the battlefield will go for care based on their particular needs and location. Research shows that trauma systems reduce patient mortality by 20 percent.

Dr. Jenkins also helped develop the statewide trauma system in Texas and is founder and chair of the Southern Minnesota Regional Trauma Advisory Committee as Minnesota progresses toward its own system. Some of his lessons learned in that role have enacted changes in military policy.

"Seventeen of our 22 hospitals in southeastern Minnesota don't have platelets or plasma to give to patients, which are essential to stop bleeding after injury; if you do not stop the bleeding rapidly, shock and then death ensues. Hemorrhage is the leading cause of



preventable death in trauma,” says Dr. Jenkins. “We started putting liquid plasma in our helicopters, and it saved lives during transport.”

This prehospital resuscitation with blood products caught the attention of military representatives from Norway to Israel, and the process has been adopted worldwide. A group of providers from the USAF spent two weeks in the Mayo Clinic trauma center learning these processes, and, eventually, the assistant secretary of defense for health affairs granted U.S. military forces permission to use freeze-dried plasma products from other countries (U.S. - developed products have not yet been approved by the U.S. Food and Drug Administration.) to save lives on the battlefield. “Without the work we did with liquid plasma at Mayo,” says Dr. Jenkins, “and our ongoing commitment to our relationship with the military, this wouldn’t have happened.”

The American Legion is honoring Dr. Jenkins’ own commitment to military service with its highest award, the Distinguished Service Medal. Jenkins will accept the award in August for in honor of achievements in trauma and critical medical care for military personnel injured in Iraq and Afghanistan.

Dr. Jenkins requested that he be allowed to accept the award “on behalf of all military medical personnel who provide life- and limb-saving care. Care along the continuum is like none other rendered and the team of experts from all disciplines are necessary for us to have achieved the lowest died of wounds rate in combat ever recorded.”

A team of experts working along an unparalleled continuum of care ... sounds like the teams between Kandahar and Bagram and Eau Claire and Mankato have more in common than flight time.

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