



US-UK Joint Partnership to Advance Ocular Trauma Care and Research Between Military Medical Services

In 2017, Assistant Secretary of Defense for Health Affairs McCaffery signed a Joint US-UK Task Force Charter establishing an international partnership to advance interoperability between the allied military medical services. This reaffirmed the partners' commitment to mutually advancing medical care in defense of global interests by sharing information and developing opportunities for combined training and collaborative research. The Blinded Veterans Association (BVA) subsequently met with senior UK Defence medical officials in London – and the British Embassy – who expressed a keen desire to officially establish a dedicated Joint Ocular Trauma Task Force to advance combat ocular trauma care and research under this partnership. The US response, however, has thus far, been noncommittal. BVA requests that Members of Congress express their staunch support for this strategic initiative between allies in order to preserve sight.

Standing Together: Ocular casualties account for approximately 14.9 percent of combat casualties, with a higher incidence during increased combat activity. Moreover, the Department of Veterans Affairs reports that upwards of 70 percent of Traumatic Brain Injury (TBI) patients suffer from visual symptoms. The legendary British-American military cooperation developed over a century of shared battlefield experience has led to a unique level of interoperability and familiarity. This extends to ocular casualty care, beginning with early battlefield treatment guidance provided by the UK in World War I – and blind rehabilitation programs at St. Dunstan's – for US casualties. This level of cooperation continues today but largely through individual, unofficial efforts. For example, several key publications reflect joint authorship; prior research symposia included joint participants; and, during a 2019 six-month partnership, a UK-US ophthalmology team delivered ocular trauma care in Afghanistan, offering one of the most active clinical specialties. Nevertheless, ocular care is routinely overlooked at official DoD/DHA policy levels. For example, neither the 2011-2014 Joint Task Force on Wounded, Ill, and Injured Service Members nor the 2012 Dismounted Complex Blast Injury Task Force reports mention military ocular trauma care or research, to our disappointment. Similarly, the current Task Force Partnership Agreement neglects ocular trauma – despite the critical importance of sight to combat effectiveness and personal welfare – and the increasing incidence of eye injuries in the past 100 years of warfare.

Common Research Goals: The 2019 John S. McCain National Defense Authorization Act (NDAA), Public Law 115-232, requires DoD to provide a Strategic Medical Research Plan that describes its medical research focus areas and medical research projects; details coordination processes across defense medical research and development (R&D) to ensure alignment with mission, promote synergy, address gaps, and minimize duplication. Public Law 115-232 also outlines efforts to coordinate with other departments and agencies of the federal government. DoD's response was sent to Congressional committees on April 8, 2019.

In summary, the report identifies the need for agility and responsiveness across all levels and types of medical care, requires an R&D strategy that is nimble, responsive, and attuned to emerging needs of the warfighter. The report is nested within national strategic guidance and

capitalizes on opportunities in science and medical technology. It also requires partnerships at home and abroad. This strategy offers a common framework to ensure that DoD continues to discover, develop, and deliver the medical capabilities required today – and in the future. It provides the basis on which to optimize infrastructure, coordination, and information exchange among the Services and defense agencies across DoD, Federal Interagency, and the civilian sector to continue to be responsive to both contemporary medical readiness requirements and future needs of the warfighter. While the Strategic Plan does not specifically mention ocular issues, the US Army Medical Research and Materiel Command (USAMRMC) maintains an ocular health research portfolio, the goal of which is to “improve the health and readiness of military personnel affected by ocular injuries and vision dysfunction by identifying clinical needs and addressing them through directed joint medical research.” Specific topics of interest include:

- Validated models to inform deployment treatment of blast ocular injury and TBI vision system injuries
- Prolonged field-care and critical-care capabilities
- Portable diagnostic tools
- Decision aids for unit-level, MEDEVAC enroute and MTF care
- Deployable ocular trauma medical treatment packages
- Research vision prosthetics and vision restoration devices, and
- Regenerative medical techniques

Most of these goals are germane to international military forces and would benefit from combat experience and cooperative research with our British allies and colleagues. A specific goal of the Joint Ocular Task Force will be reporting on these initiatives at the Schepens 7th Military Vision Symposium “Future Military Conflicts and Civilian Mass Casualties Events.” The symposium, which will bring together international ocular trauma experts and vision researchers, is scheduled for March 5-6, 2021 in Boston.

A Trauma Task Force should be officially established now, with specific objectives to collaboratively identify opportunities for enhancing interoperability between the US and UK in ocular combat casualty care. The Task Force would improve the prevention, diagnosis, mitigation, treatment, and rehabilitation and reintegration of ocular injuries and TBI-associated vision loss. It would also enhance vision research exchange. This initiative also seeks to improve civilian ocular trauma care through migration of military lessons learned, particularly regarding issues facing first responders and non-ophthalmic providers in civilian disasters or acts of terrorism, resulting in improved emergency medical services and vision trauma outcomes.

We call upon the Department of Defense, Department of Veterans Affairs and Congressional Armed Services Committee members to request that the Assistant Secretary of Defense for Health Affairs (ASDHA) and Secretary of Veterans Affairs – working with their UK Defence Medical colleagues – sign an agreement to establish this Joint Ocular Trauma Task Force for five years.