

International Trauma Capacity Building Programs: Modernizing Capabilities, Enhancing Lethality, Supporting Alliances, Building Partnerships, and Implementing Reform

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ABSTRACT The Military Health System directly supports the National Security and Defense Strategy priorities of modernizing capabilities, enhancing lethality, supporting alliances, building partnerships, and implementing reform. Trauma medicine training programs with partner nations is a key lever that can be pulled, using a risk-based decision-making process, to scale up efforts toward these national priorities.

“We will only succeed in advancing American interests and upholding our universal values by working in common cause with our closest allies and partners.”¹

BACKGROUND

The U.S. President directed the departments and agencies of the U.S. Government to align actions with the Interim National Security Strategic Guidance.¹ The guidance explicitly states the USA will modernize our military capabilities, while leading first with diplomacy, and revitalize USA’s unmatched network of alliances and partnerships. These alliances and partnerships also feature prominently in the most recent National Defense Strategy (NDS).² Three lines of effort were outlined in the NDS which included lethality, partnerships, and reform. Lethality focuses on building a more lethal force by modernizing key capabilities, evolving innovative operational concepts, and cultivating workforce talent. The second line of effort related to partnerships focuses on strengthening alliances and attracting new partners. This deepens interoperability by expanding alliances and partnerships in the Indo-Pacific, fortifying the North Atlantic Treaty Organization Alliance, and forming enduring coalitions in the Middle East. The third line of effort seeks to reform the way Defense does business by organizing for innovation through consolidation, elimination, or restructure as needed.

The Military Health System (MHS) directly supports the National Security Strategy (NSS) and NDS efforts to enhance lethality, revitalize partnerships, and facilitate reform. With a renewed focus on prioritizing joint operational medicine capabilities, the MHS enables combat power through investments in the sustainment warfighting function.³ The MHS revitalizes partnerships by implementing the U.S. Department

of Defense (DoD) policy on Global Health Engagement to “enhance the readiness of DoD medical forces and sustainably improve the operational skills of partner nation personnel.”⁴ And with congressional oversight through the National Defense Authorization Act, the MHS is reforming healthcare through the consolidation of garrison health capabilities further enabling the readiness of the force and a ready medical force.⁵ One specific sector in the MHS where these three lines’ efforts intersect is trauma medicine.

Although significant lessons were learned in support of combat operations over the past 15 years, sustainment of knowledge, skills, and abilities of high demand and low-density trauma experts remains challenging.⁶ Indeed, criticism has been leveled at the MHS that surgical case volume and complexity are insufficient to maintain surgical skills adversely affecting a ready medical force and the sustainment warfighting function.⁷ When surgeons do have the opportunity to perform complex surgeries, it is usually far from the austere, multinational environment of the battlefield. Programs such as the Air Force-University of Cincinnati Medical Center (Center for Sustainment of Trauma and Readiness Skills), Navy-University of Southern California Trauma Program, and the U.S. Army-University of Miami trauma partnership address surgical skill atrophy but still lack training in resource-constrained environments. The MHS-American College of Surgeons partnership is another step forward in addressing the lack of skills sustainment opportunities.

Building upon the success of these programs, efforts are underway to assist partner nations in doing the same. The U.S. Military is supporting a Foreign Military Sales (FMS) case funded by the United Arab Emirates (UAE), whereby U.S. military trauma experts are assigned for one year unaccompanied or two years accompanied with families to Abu Dhabi and are embedded with Emirati military personnel in a UAE civilian medical facility.⁸ This unique approach achieves multiple strategic objectives. First, the partner nation who resources the FMS case enhances their trauma skills to better support national, regional, and international security independently or as a part of multinational operations. Second, the USA sustains a ready medical force by exercising knowledge, skills, and abilities in a 750-bed facility jointly run by Abu

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Dhabi Health Services Company, Sheikh Shakhbout Medical City LLC, and the Mayo Clinic. Third, the USA through the partnership gains access to the facility to potentially reform how and where medical services are provided in the region as part of U.S. Central Command plans and operations. All three of these objectives are directly in line with the interim NSS guidance and NDS—enhancing lethality, revitalizing partnerships, and reforming how the USA does business.

This is not to say the other models of maintaining a ready medical trauma team are no longer relevant. This is not true. Rather, it highlights the unique three for one return on investment when supporting international partners whereas other models provide a one for one return focused primarily on U.S. military medical readiness. There is room for programmatic analysis to truly measure the effect of each objective and weight the cost and benefit of future investments as trauma capabilities are a finite resource within the U.S. DoD.⁹

Military Health System (MHS) support of the interim NSS guidance and NDS should include expanding bilateral trauma capacity-building partnerships in priority Geographic Combatant Commands (GCCs) including a similar three for one investment approach to support the Indo-Asia Pacific Command (INDOPACOM). Vietnam is one of the U.S. DoDs strategic partners in the INDOPACOM Region. While it does not have the financial resources of the UAE to independently fund a FMS case, it does have a large military healthcare system that provides civilian care and a desire to improve its trauma system. Integrating U.S. trauma teams in the military hospitals supports partner nation capability building while providing critical skill sustainment opportunities. Other GCCs could also benefit from the strategic use of medical resources to foster security cooperation while simultaneously maintaining critical wartime skills.

Current and future force mission requirements and the associated risk-based decision-making process should inform the demand for MHS domestic and international trauma capacity-building programs. The single FMS case cited above has presented challenges to the U.S. DoD in meeting the manpower requirements with the low-density resource. Hard decisions will have to be made. As information is collected to determine the impact of accomplishing the various objectives through international trauma capacity-building programs, senior leaders including the Assistant Secretary of Defense for Health Affairs, Joint Staff Surgeon, Service Surgeons Generals, and GCC Surgeons can make data-driven decisions in terms of resource allocation.

A phased approach to implementation will be necessary. Leveraging the Uniformed Services University Department of Global Surgery to support a needs assessment with the GCC is a great first step. Designing follow-on health engagements leveraging security cooperation appropriations to set conditions for the larger program will be needed. Establishing a sustainable program of record with the support of the GCC, Joint Staff, Services, Defense Security Cooperation Agency,

Department of State, U.S. Embassy, and the partner nation among others will be critical. Should a bilateral approach not be feasible, exploring a multilateral option could be a viable alternative. The UK, a U.S. ally, has experience in conducting medical training for Peacekeeping Operations in Vietnam.¹⁰ A U.S. ally–partner nation model may be the type of solution that could work best in the Indo-Asia Pacific region, specifically in Vietnam.

In closing, the MHS directly supports the NSS and NDS priorities of modernizing capabilities, supporting alliances, building partnerships, and implementing reform which directly supports enhanced lethality through the sustainability warfighting function. Trauma medicine is a key lever that can be pulled, using a risk-based decision-making process, by the MHS to scale up efforts toward these national priorities. Developing trauma training programs with partner nations, with support from allies where feasible, is an efficient way to develop the MHS workforce and deepen interoperability while enhancing security cooperation.

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CONFLICT OF INTEREST STATEMENT

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REFERENCES

1. Interim National Security Strategic Guidance: The White House. Washington, DC. Available at <https://www.whitehouse.gov/wp-content/uploads/2021/03/NSC-1v2.pdf>; March 2021; accessed March 31, 2021.
2. Department of Defense, National Defense Strategy: Sharpening the American military's competitive edge. Washington, DC. Available at <https://dod.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf>; January 2018; accessed March 31, 2021.
3. US Department of Defense Joint Publication 3-0, Joint Operations. Available at https://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/jp3_0ch1.pdf?ver=2018-11-27-160457-910; October 22, 2018; accessed March 31, 2021.
4. US Department of Defense Instruction 2000.30: Global health engagement activities. Available at https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/200030_dodi_2017.pdf; accessed March 31, 2021.
5. US Congress National Defense Authorization Act for Fiscal Year 2017. Available at <https://www.congress.gov/114/plaws/publ328/PLAW-114publ328.pdf>; December 23, 2016; accessed March 31, 2021.
6. Sternberg S: A crack in the armor: military health system isn't ready for battlefield injuries. US News and World Report. Available at <https://www.usnews.com/news/national-news/articles/2019-10-10/military-health-system-isnt-ready-for-battlefield-injuries>; April 19, 2018; accessed March 4, 2021.
7. Sternberg S: Safety in numbers: low volumes at military hospitals imperil patients. US News and World Report. Available at <https://www.usnews.com/news/national-news/articles/2018-04-19/patient-shortage-erodes-military-surgeons-skills-preparedness-for-war>; April 19, 2018; accessed March 4, 2021.

8. Bumgardner R: Medical ties bind forces in partnership. *Army Mag* 2020; 70(8). Available at <https://www.ausa.org/articles/medical-ties-bind-forces-partnership>; accessed March 31, 2021.
9. US Department of Defense Instruction 5132.14; Assessment, monitoring, and evaluation policy for the security cooperation enterprise. Available at https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/513214_dodi_2017.pdf; accessed March 31, 2021.
10. British Military works with Vietnam People's Army. British Embassy Hanoi. Available at <https://www.gov.uk/government/news/british-military-works-with-vietnam-peoples-army>; July, 2019; accessed March 4, 2021.