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Global Health Engagement: Feasibility of Consolidating and Integrating Capabilities of Defense Institute for Medical Operations and Center for Global Health Engagement

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Abstract

Global Health Engagement (GHE) related education and training of the U.S. and international militaries are important missions but are carried out by disparate organizations in the military health system. Two such organizations, Center for Global Health Engagement (CGHE) and Defense Institute for Medical Operations (DIMO) are the subjects of this study. The 2019 House Arms Services Committee (HASC) report asked the Secretary of Defense to provide a briefing on consolidation and integrating capabilities of these organizations. Specifically the report expressed concern over potential duplication of efforts and raised the possibility of efficiency gains through economies of scale.

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Executive Summary

Global Health Engagement (GHE) related education and training of the U.S. and international militaries are important missions but are carried out by disparate organizations in the military health system. Two such organizations, Center for Global Health Engagement (CGHE) and Defense Institute for Medical Operations (DIMO) are the subjects of this study. The 2019 House Arms Services Committee (HASC) report asked the Secretary of Defense to provide a briefing on consolidation and integrating capabilities of these organizations. Specifically the report expressed concern over potential duplication of efforts and raised the possibility of efficiency gains through economies of scale.

We compared and contrasted CGHE and DIMO and studied both organizations by conducting literature review, discussions with the organization's staff, leadership and other subject matter experts using RACI matrix, value proposition, and value chain mapping, and finally putting all the observations and findings in DOTmLPF framework. We also added funding, relationships, efficiency, and effectiveness attributes to the DOTmLPF framework.

We point out that CGHE does much more than training, in fact only one CGHE directorate—Training and Professional Development Directorate (TPD)—trains the U.S. military in GHE-related topics. DIMO trains international militaries in GHE related topics. Another major difference between the TPD and DIMO is the funding. TPD is funded by a single source-Uniformed Service university while DIMO is funded by a variety of sources. Lastly, TPD trains on what global health engagement is while DMO trains on how to conduct health related activities.

Despite the differences, we find that the DIMO and CGHE capabilities can be integrated. To minimize the disruptions to ongoing training missions, we recommend that the processes for funding be set up and the contract personnel hired via the Henry Jackson Foundation. We also looked at other organization options based on the attributes of an ideal organization—a joint organization with consistent resources and robust internal and external processes to help meet the CCMDs requirements and to ultimately meet the objectives of the campaign plans. We list three courses of actions and evaluate them against the attributes of an ideal organization. Finally, we recommend that a broader integration of GHE related education and training be explored.

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Introduction

As part of its mission to achieve US national security objectives, the US Department of Defense (DOD) coordinates with other nations and US government agencies to achieve interoperability in health-related activities. The collection of activities that support such interoperability is called global health engagement (GHE). Two entities within the US military health system provide key support functions for DOD GHE, particularly for GHE education and training: the Defense Institute for Medical Operations (DIMO) and the Center for Global Health Engagement (CGHE).

DIMO was created in 2002 to provide health education and training to partners around the world. Since 2010, DIMO has been a part of the Air Force Medical Support Agency (AFMSA) under the Air Force Medical Service (AFMS). DIMO's factsheet describes it as "… a dual-service agency comprised of USAF and Navy personnel committed to providing world class, globally-focused, health education and training to partners around the world. DIMO utilizes subject matter experts throughout DOD to develop curriculum and teach courses around the world." DIMO's mission and vision statements follow.

DIMO mission: To achieve security cooperation through health education and training in the global health environment.

- **DIMO vision:** To be the premier provider of security cooperation-focused health education and training that builds strong, resilient, international partnerships.

CGHE is a Center of the Uniformed Services University for Health Sciences (USUHS) that was established in 2016, although it was preceded by the Center for Disaster and Humanitarian Assistance Medicine (CDHAM), which had a similar mission. CGHE's self-described lines of effort include developing and executing education and training activities to meet GHE capability needs; supporting assessment, monitoring, and evaluation of GHE activities and managing the GHE Research Initiative; and providing GHE operational support to the Combatant Commands (CCMDs), the services, and other DOD entities as requested. The CGHE mission and vision statements follow.

CGHE mission: Provide operational support to the DOD GHE enterprise to meet national security objectives.

- **CGHE vision:** By the end of CY 2021, CGHE will be globally recognized as a leading institution for the DOD GHE enterprise.

These high-level descriptions and guiding statements suggest that some of the activities DIMO and CGHE undertake in support of DOD GHE education and training may overlap. In the fiscal year (FY) 2019 National Defense Authorization Act (NDAA), the House Armed Services Committee (HASC) directed the Secretary of Defense (SECDEF) to study the possibility of consolidating DIMO and CGHE to avoid potential duplication of GHE support efforts and, more generally, to provide operational support for GHE more efficiently. The [Acting] Deputy Assistant Secretary of Defense for Health Readiness Policy and Oversight (DASD (HRP&O)) in turn asked CNA to provide analysis in support of the HASC-requested study.

Background

To provide additional context for HASC's request to evaluate consolidating DIMO and CGHE, we present relevant definitions and policy guidance for GHE.

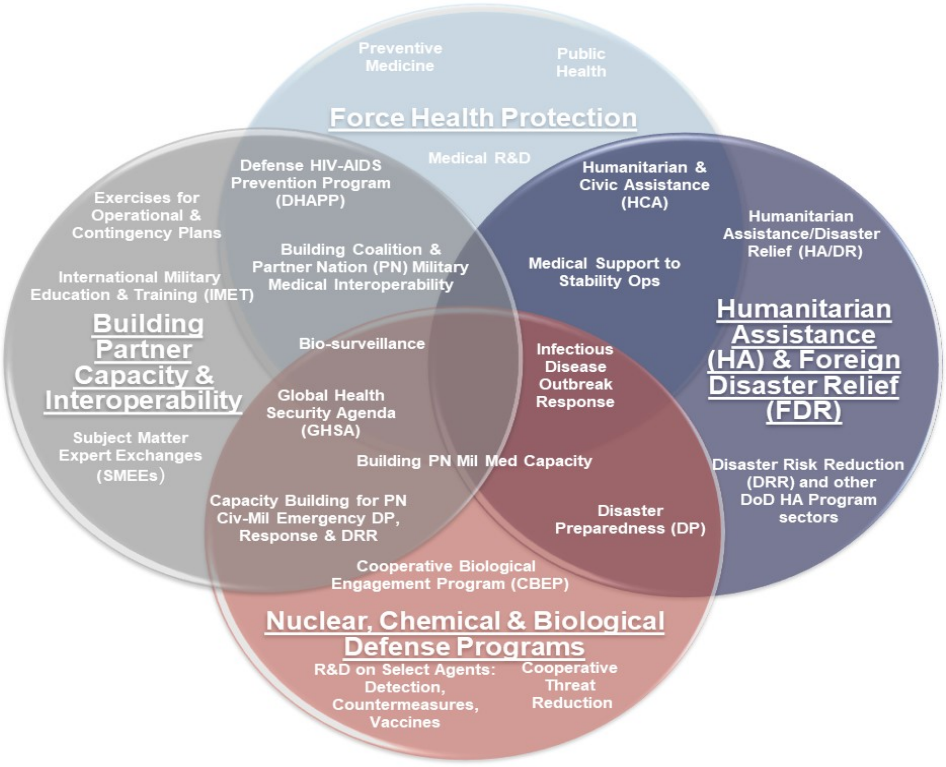
Definition of GHE

As outlined in DOD Instruction (DODI) 2000.30 [1], the definition of GHE in DOD is as follows:

> Interaction between individuals or elements of DOD and those of a [Partner Nation's] PN's armed forces or civilian authorities, in coordination with other USG departments and agencies, to build trust and confidence, share information, coordinate mutual activities, maintain influence, and achieve interoperability in health-related activities that support U.S. national security policy and military strategy.

To illustrate the breadth of GHE activities and their relationships, we present Figure 1, which is a reprint from DODI 2000.30.

Figure 1. Conceptual framework for spectrum of DOD GHE activities in DODI 2000.30



Source: DOD Instruction 2000.30.

Each of the four main areas in the framework—Force Health Protection, Humanitarian Assistance and Foreign Disaster Relief, Nuclear, Chemical, and Biological Defense Programs, and Building Partner Capacity and Interoperability—includes specific GHE activities, some of which belong to more than one main area. To understand how DOD manages GHE activities and where DIMO and CGHE fit into this management system, the framework should be viewed within its broader context: DOD's overall security cooperation mission, which includes both health and non-health-related security cooperation activities. This broader security cooperation mission requires a brief discussion of the Defense Security Cooperation Agency (DSCA), the DOD organization charged with coordinating security cooperation.

Defense Security Cooperation Agency

DSCA's website notes the following:

- DSCA's mission is to advance U.S. national security and foreign policy interests by building the capacity of foreign security forces to respond to shared challenges. *DSCA leads the broader U.S. security cooperation enterprise in its efforts to train, educate, advise, and equip foreign partners.*
- DSCA administers security cooperation programs that support U.S. policy interests and objectives identified by the White House, Department of Defense, and Department of State. These objectives include developing specific partner capabilities, building alliances and partnerships, and facilitating U.S. access.
- DSCA integrates security cooperation activities in support of a whole-of-government approach; provides execution guidance to DOD entities that implement security cooperation programs; exercises financial and program management for the Foreign Military Sales system and many other security cooperation programs; *and educates and provides for the long-term development of the security cooperation workforces.* [2] (Emphasis added for the education and training-related functions).

We italicized DSCA's own description of education and training missions because these are especially relevant for GHE activities. In particular, DSCA oversees the international military education and training (IMET) and enhanced IMET (E-IMET) functions associated with security cooperation; a subset of IMET and E-IMET functions is the international medical education and training in support of GHE.

DIMO

DSCA's responsibilities and authorities described above include the fact that it is the primary funding agency for DIMO. Indeed, the relationship of DSCA and DIMO as it relates to international medical education and training within IMET and E-IMET was formalized most recently in a 2015 memorandum of understanding (MOU) between DSCA, the USAF Medical Service (AFMS), and US Navy Bureau of Medicine and Surgery (BUMED) [3]. The MOU, signed by the Director of DSCA and the Surgeons General (SGs) of the USAF and the Navy in 2015 and effective until August 2018, outlines the roles and responsibilities for DSCA, the AFMS, and BUMED for operations and support of DIMO. Although the Navy Surgeon General opted not to sign a renewal of the memo after August 2018, we provide the following direct quotes from the MOU to provide background on roles and responsibilities for maintaining DIMO in recent years.

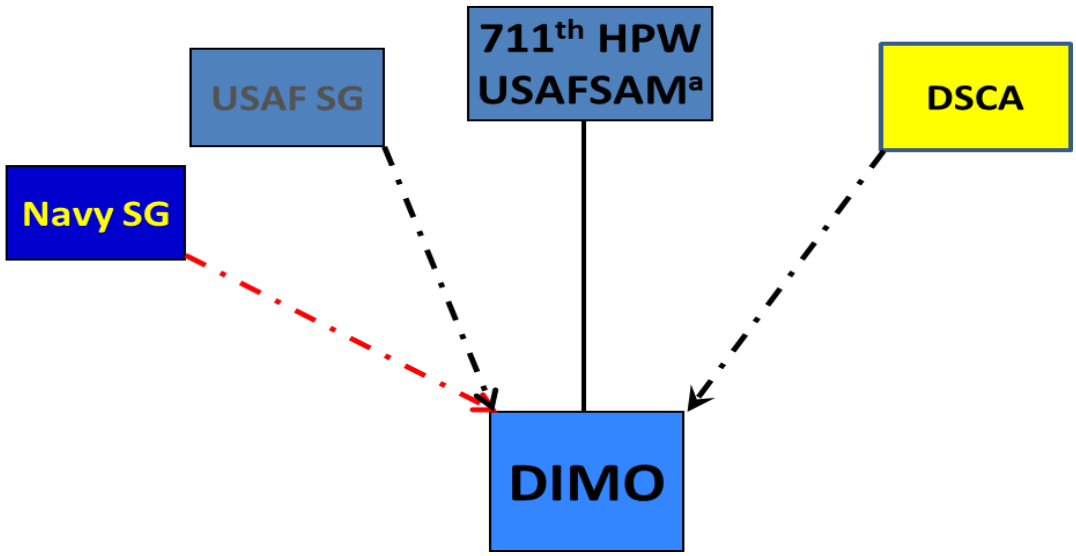
- "DIMO serves as the primary coordinator and execution agency for DSCA security cooperation related to international medical education and training. Its mission is to "teach

medical skills and strategic planning to partner nations, promoting security cooperation and global health education.""

- "DSCA provides funding to DIMO to conduct global health education and training activities."
- "AFMS seeks global health engagement opportunities to enhance clinical and health system management capabilities of our coalition partners, allies, and friendly forces in support of the National Defense Strategy and the USAF Global Partnership Strategy."
- "BUMED supports the CCMD TCPs and the Navy's Campaign Support Plan by partnering with joint, interagency, international community, and specific host nations and providing integrated and focused medical forces to conduct maritime health engagement operations. It also supports relationship building activities that support the CCMD and related Naval Component Commanders by providing appropriate health capabilities and services to meet mission need."

Appendix A contains the MOU in its entirety.

Figure 2. Organizational relationships in support of DIMO



Source: CNA. We use a dashed red line to indicate that the Navy Surgeon General elected not to sign an extension of the MOU when it expired in August 2018.
[a] The 711th Human Performance Wing (HPW) at USAF School of Aerospace Medicine (USAFSAM) is located at Wright-Patterson Air Force Base (AFB) near Dayton, Ohio. The 711th HPW oversees DIMO, which is physically located on Joint Base San Antonio-Lackland in San Antonio, Texas.

CGHE

Compared with DIMO, CGHE is relatively new, having been established in early calendar year 2016. However, it was preceded by CDHAM, a center within USUHS tasked with supporting GHE. To provide context for CGHE's origination, we turn to reference [4], which describes CDHAM as follows:

> CDHAM was formally established at USU by the Defense Appropriations Act of 1999. Organized within the Department of Military and Emergency Medicine at USUHS, CDHAM is postured as DOD's focal point for academic aspects of medical stability operations. Its vision is to contribute to national security by achieving regional and global stability through health care diplomacy. Its mission is to provide support to DOD agencies, through education and training, consultation, direct support and scholarly activities, regarding the role of military health care in response to disasters and humanitarian assistance missions.

USU adds more detail to CGHE's functions [5]:

> CGHE is a leader in educating DOD and non-DOD partners in areas of global health engagement (GHE) planning, initiation, and sustainment. Our primary goal is to develop and implement GHE education and training to prepare Military Health System (MHS) professionals for the planning and conduct of DOD GHE activities. The program intends to achieve this goal by way of:
>
> - Identifying and addressing gaps in GHE training across the Services and Combatant Commands;
> - Designing and delivering programs and curricula that encompass a range of GHE activities and are applicable to DOD personnel at various levels across the services and combatant commands; and
> - Coordinating with stakeholders across the interagency and outside the US government for the purpose of developing GHE education and activities.

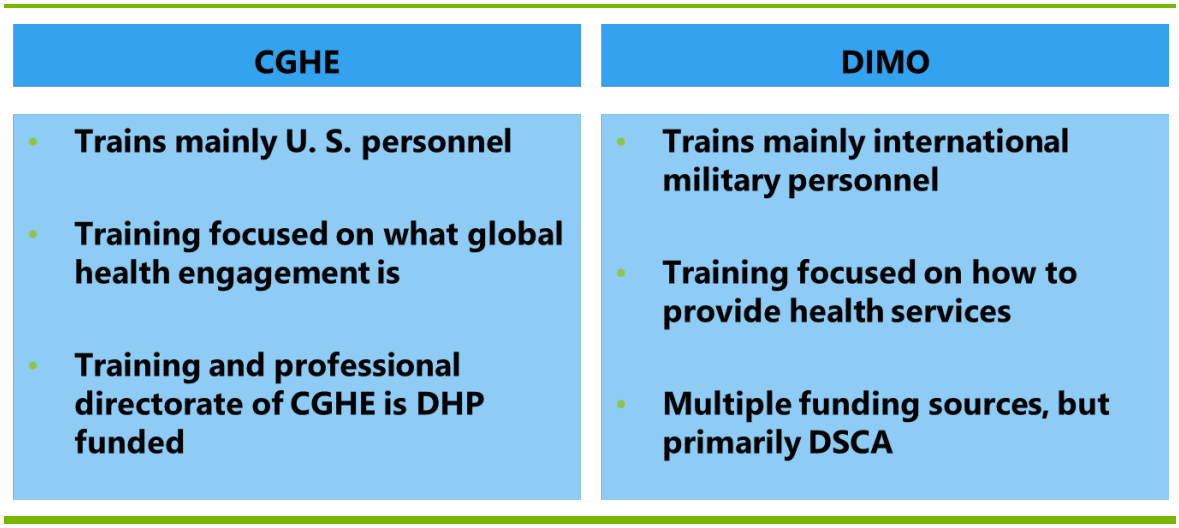
Also according to CGHE, it offers an array of GHE courses (from introductory to advanced) that are held throughout the year in different locations and settings.

Key differences between CGHE and DIMO

Although CGHE and DIMO both have clear missions to support the operational forces through their GHE education and training functions, key differences emerge in how the two organizations provide that support. Specifically, there are differences in who the organizations are likely train, the focus of that training, and how they are funded. On the last point, note that unlike DIMO, CGHE does not have a formal relationship with DSCA via an MOU or other agreement, nor does it currently receive funding from DSCA. Instead, CGHE receives majority

of its funding through the Defense Health Program (DHP). Figure 3 summarizes the key differences between the two organizations; we elaborate on these differences later in this report.

Figure 3. Key differences between CGHE and DIMO



Source: CNA.

Issues and study tasking

In its FY 2019 NDAA report, the House Armed Services Committee (HASC) directed the Secretary of Defense to assess feasibility of consolidation and integration of the capabilities of DIMO and CGHE [6]. The HASC states the following:

> The committee recognizes the Department of Defense's efforts to develop global health engagement (GHE) capabilities that have become an integral part of combatant command security cooperation initiatives. These activities are used to improve military health professional readiness and interoperability by providing important training opportunities and experiences in operational settings with partner nations. However, the committee is concerned that there is duplication of effort with the Defense Institute for Medical Operations. *The Defense Institute for Medical Operations supports overseas train-the-trainer programs on topics such as disaster management, force health protection, health surveillance, and other areas of health practice.*
>
> As part of the Uniformed Services University of Health Science (USUHS) mission to support military readiness, *the Center for Global Health Engagement was established by the Department of Defense to provide an enterprise-wide hub for*

> *GHE to support the combatant commands with leadership and scholarship; strategic and operational support to the joint force; training and professional development; management of GHE-related research; and assessment, monitoring, and evaluation activities.* The committee believes USUHS provides a vital nexus of education and training for the Military Health System and may serve as an important support platform that provides economies of scale related to training, education, campus locations, and infrastructure support.
>
> Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services…on the feasibility of consolidating and integrating the capabilities of the Center for Global Health Engagement and the Defense Institute of Medical Operations into one organization.

To support the HASC request of SECDEF, the Assistant Secretary of Defense/Health Affairs (ASD/HA) asked CNA to conduct a feasibility study to determine whether it is possible to consolidate DIMO and CGHE. Furthermore, if consolidation is feasible, the Acting Deputy Assistant Secretary of Defense for Health Readiness Policy and Oversight (DASD (HRP&O)) asked CNA to review and evaluate the consolidation/integration of capabilities and describe how duplication of GHE efforts could be minimized. Some of the key differences that we show in Figure 3 are mirrored in this section of the House Armed Services Committee report (in italics).

Approach

To understand organizational strengths and challenges, we collected information on the both organizations' ability to provide GHE education and training effectively and efficiently. We engaged subject matter experts (SME) from inside and outside DIMO and CGHE in discussions for information on the organizations' status and the potential for consolidation.

We then use three methodologies to assess the potential for consolidating the two organizations:

1. We conducted a literature review and engaged over 35 stakeholders in discussions.
2. We conducted value proposition, value chain mapping, and generated a RASCI (responsible, accountable, sourcing/supporting, consulted and Informed) matrix of DIMO and training and professional development directorate of CGHE. We also use the funding, relationships, effectiveness, and efficiency (FREE) methodology.
3. Finally, we looked at the results through the lens of doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTmLPF) as described in the Joint Capabilities Integration Development system (JCIDS)[7].

Report outline

The remainder of this report is divided into four sections. The first section provides the context for GHE education and training. Here we review and summarize key GHE-related policy documents, including a description of the national security strategy documents that GHE must support, a description of the laws, regulations, and policy guidance documents that govern DOD GHE, and a review of previous GHE and other studies relevant to our tasking. The second section describes our methodology to determine whether and how DOD can consolidate CGHE and DIMO, including a review of the possible barriers to consolidation. The third section describes our findings. The fourth section presents our conclusions and recommends a way forward.

Context for DOD GHE Education and Training

National strategy and GHE education and training

Strategic guidance for GHE education and training in the DOD is ultimately derived from the US national security, national defense, national military, and national health security strategy documents [8-11].

As of the writing of this report, reference [8] describes the unclassified version US national security strategy. The strategy is comprised of the four pillars listed below. Where relevant, we highlight the prioritized actions listed under each pillar that relate most closely to GHE education and training.

1. "Protect the American People, the Homeland, and the American Way of Life," under which "Combat Biothreats and Pandemics" is listed as a strategic objective. A priority action under this strategic objective is to detect and contain biothreats at their source. To do so, the NSS says, "We will work with other countries to detect and mitigate outbreaks early to prevent the spread of disease. We will encourage other countries to invest in basic health care systems and to strengthen global health security across the intersection of human and animal health to prevent infectious disease outbreaks. And we will work with partners to ensure that laboratories that handle dangerous pathogens have in place safety and security measures." [8] p. 4.
2. "Promote American Prosperity," under which "…nurture a healthy innovation economy that collaborates with allies and partners, improves STEM education, draws on an advanced technical workforce, and invests in early-stage research and development (R&D)" is listed as a priority action. [8] p. 4.
3. "Preserve Peace through Strength," under which "We must enable forward-deployed field work beyond the confines of diplomatic facilities, including partnering with military colleagues in conflict-affected states" is listed as a priority action. [8] p. 4.
4. "Advance American Influence."

As the third NSS pillar makes clear, national defense is a critical part of national security. Reference [9] summarizes the most recent unclassified version of the US national defense

strategy (NDS). It outlines 11 DOD strategic objectives, three of which stand out as particularly relevant to GHE education and training:

- Sustaining Joint Force military advantages, both globally and in key regions
- Enabling US interagency counterparts to advance US influence and interests
- Maintaining favorable regional balances of power in the Indo-Pacific, Europe, the Middle East, and the Western Hemisphere

The NDS summary also outlines a strategic approach to achieving the 11 strategic objectives, which it summarizes with three goals: build a more lethal force, strengthen alliances and attract new partners, and reform DOD for greater performance and affordability. Under the second goal of strengthening alliances and partnerships, the NDS proposes to achieve the goal by (1) upholding a foundation of mutual respect, responsibility, priorities, and accountability, (2) expanding regional consultative mechanisms and collaborative planning, and (3) deepening interoperability. This provides strategic context for DOD GHE education and training.

Under the third goal of achieving greater performance, the NDS pledges that, "we [DOD] will reduce or eliminate duplicative organizations and systems for managing human resources, finance*, health services*, travel, and supplies" [9] (emphasis added). This provides strategic context for our tasking from OSD/HA to examine consolidating GHE education and training functions within DOD.

The National Military Strategy (NMS) [10] describes the US military's contribution to national security—national defense. This 2015 document, for which the Chairman of the Joint Chiefs of Staff prepared a forward, is the most recent available in the unclassified domain. Like the NDS, the NMS calls for strengthening the US military's global network of allies and partners and advancing globally integrated operations. Among the top 12 priority military missions that military commanders use to advise US national leaders, 3 are closely related to GHE education and training goals: provide a global stabilizing presence, conduct military engagement and security cooperation, and conduct humanitarian assistance and disaster response.

Demand for and supply of GHE education and training

Federal laws and their accompanying regulations, along with policy documents that further delineate roles, responsibilities, and guidelines for action, provide more detailed roadmaps for implementing these national strategies. We summarize these as they relate to GHE education and training. In particular, we review documents that grant responsibility and authority for

generating demand for GHE (and therefore demand for GHE education and training) as well as those that grant authority and responsibility for supplying GHE education and training.

Demand for GHE education and training

We examine the laws and policies that describe the demand for GHE, which in turn generates demand for GHE education and training. Our examination begins with the joint forces followed by summaries of service guidance related to GHE education and training.

Law and policy

Joint Publications (JPs)

Doctrine and guidance for GHE efforts begins with JP 3-07 Stability Operations, 29 September 2011, which was prepared under the direction of the Chairman of the Joint Chiefs of Staff [12]. The following selected quotes summarize the scope and purpose of JP 3-07.

- **Scope** "…provides guidance for operating across the range of military operations to support US Government agencies, foreign governments, and intergovernmental organizations, or to lead such missions, tasks, and activities until it is feasible to transfer lead responsibility."
- **Purpose** "…sets forth joint doctrine to govern the activities and performance of the Armed Forces of the United States in joint operations and provides the doctrinal basis for interagency coordination and for US military involvement in multinational operations. It provides military guidance for the exercise of authority by combatant commanders and other joint force commanders (JFCs) and prescribes joint doctrine for operations, education, and training. It provides military guidance for use by the Armed Forces in preparing their appropriate plans."

The entities to whom the JP applies include "joint staff, commanders (CDRs) of combatant commands, subunified commands, joint task forces, subordinate components of these commands, and the Services."

CCMDs and coordination with DSCA

CCMDs are authorized to request resources for stability operations, but as JP 3-07 alludes, such requests require interagency coordination to implement. The DSCA Security Assistance Management Manual (SAMM) contains the legislative authorities, executive orders, regulations, directives, instructions, and manuals for security cooperation [13]. The SAMM also outlines responsibilities and authorities for planning and implementing security cooperation activities, including IMET activities. With regard to IMET, through which requests for GHE education and training activities are coordinated, DSCA's website states, "Secretary of State

determines which countries will have [IMET] programs. Secretary of Defense executes the program."[1]

Chapter 10 of the SAMM covers IMET, and section 3.2 outlines how requests for potentially sensitive or lethal training provided under IMET must be made.

> New or first time requests for potentially sensitive or lethal training under IMET and FMS programs must be staffed through the Security Cooperation Organization (SCO), the Combatant Command (CCMD), and the military department (MILDEP) to the Defense Security Cooperation Agency (DSCA) (Directorate for Security Assistance (DSA) for coordination and approval by the Under Secretary of Defense for Policy (USD(P)) and the Department of State-Bureau of Political and Military Affairs Office (DoS(PM)). The request should include a description of the training requested, identification of the partner nation unit to be trained, rationale and justification for the training to include how this supports the CCMD Theater Campaign Plan, Country Team's Mission Resource Strategic Plan (MRSP), and verification of Chief of Mission concurrence. A review and approval is required for each partner nation unit requesting this training, even if such training was provided to another unit in the requesting partner nation. [13]

Although requests for GHE education and training are not necessarily sensitive (or lethal), the passage illustrates the complexity in coordinating IMET and therefore GHE education and training. CCMDs can make IMET requests for GHE education and training, but the State Department has a determining role, while DSCA is a key coordinating agency. Moreover, JP-3-07 does not grant exclusive authority to CCMDs to generate demand for GHE education and training; subunified commands, subordinate commands, and the services themselves are listed as well. This can obscure the clarity and transparency of the demand signal for GHE education and training in theatre and can further complicate the coordination of the response to the demand signal.[2]

Demand for DIMO missions

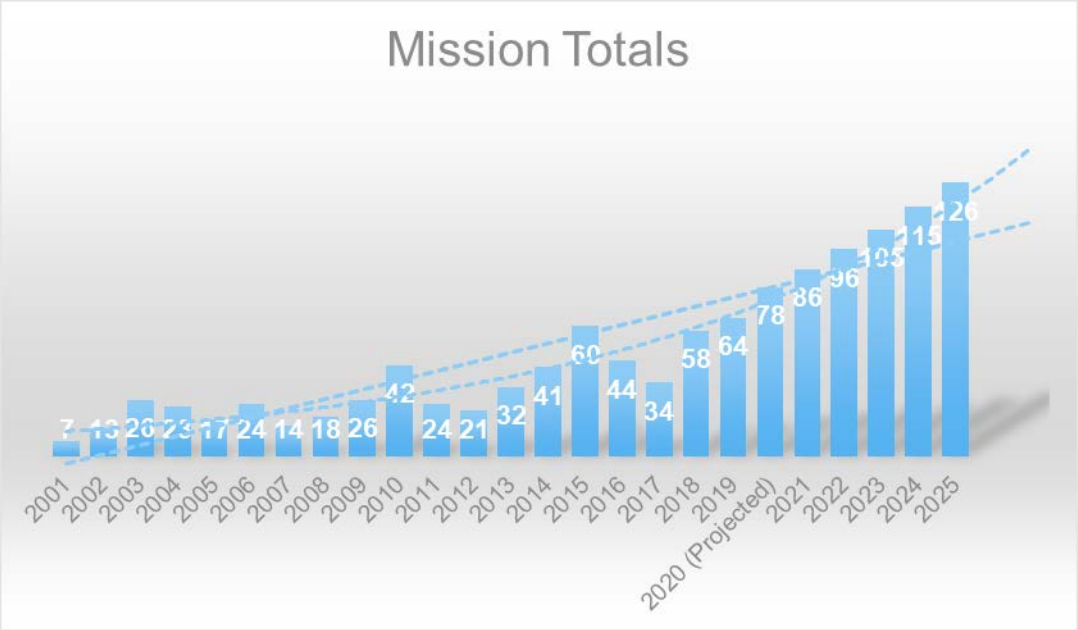
The demand for GHE education and training activities in theatre from DIMO appears to be strong and growing. Figure 4 shows the historical number missions performed from 2001 to

[1] https://www.dsca.mil/programs/international-military-education-training-imet accessed 11 November 2019.

[2] More specific detail on security cooperation education and training coordination between the services can be found in Army Regulation 12–15/SECNAVINST 4950.4B/AFI 16–105 Joint Security Cooperation Education and Training. It prescribes "policies, responsibilities, procedures, and administration for the education and training of international military students by the Departments of the Army, the Navy, and the Air Force as authorized by the U.S. security assistance legislation. This regulation deals specifically with training under the International Military Education and Training Program, the Foreign Military Sales Program, and related programs; and contains instructions on the U.S. Field Program."

2019 and a forecast of the number of missions that DIMO expects to perform annually from 2020 to 2025.

Figure 4. Annual number of DIMO mobile training missions



Source: CNA graph of data supplied by DIMO.

The actual number of missions completed from 2001 to 2019 is not the true measure of demand because it is possible that the CCMDs and other entities requested more missions than DIMO was able to support. Thus, we consider the mission numbers from 2001 to 2019 to be a lower bound of the demand for DIMO GHE education and training. It is clear, however, that the number of missions that DIMO performed grew substantially over the last two decades. Furthermore, the demand for missions appears robust through 2025.

Supply of GHE education and training

Law and policy also guides how GHE education and training will be supplied to meet the demand for missions in theatre.

DOD policy

The central policy for the provision of GHE education and training is found in DODI 2000.30 [1]. The DODI does the following:

- Establishes policy, assigns responsibilities, and prescribes procedures for the conduct of GHE activities with partner nation (PN) entities.
- Establishes the DOD GHE Council, and prescribes Council functions, responsibilities, membership, and procedures.
- Establishes the definition for GHE and is distinguished from the Global Health definition in accordance with the May 15, 2013 DOD GHE policy guidance; integrates health engagement language in the GHE definition consistent with Section 715 of Public Law 112-239.

Service policies

USAF

The USAF GHE factsheet summarizes how the USAF engages in GHE education and training and lists the AFMS GHE assets that implement the engagement [14].

- **International Health Specialist (IHS) Program:** IHS links end-state security objectives for security cooperation through health-related lines of effort to establish the following three areas: access and influence, regional stability, and interoperability.
- **DIMO:** DIMO enhances partner nation (PN) capability, force health protection, and health services. (The description of the MOU between DSCA and DIMO above and illustrated in Figure 2 provides additional detail about the relationship between the USAF and DIMO).
- **USAF School of Aerospace Medicine (USAFSAM):** USAFSAM optimizes PN aeromedical resources through regional mobile training and in-residence courses with PNs.

The IHS program bears particular mention. It is a skill specialty unique to the USAF that plays a critical role in USAF contributions to GHE education and training. Here we quote from USAF Instruction (AFI) 44-162 to describe the program [15]:

- The IHS Program Office will develop, maintain and sustain information on individual specialties:
    - Second language skills at a designated level, as defined in Chapter 3 of [15]. All languages are acceptable in this program and will be matched to mission needs.

- Formal education (and/or equivalent experience) focusing on cultural, political, sociological, economic and geographic factors of specific international countries/regions.
- Knowledge of regionally specific health issues such as endemic disease threats, natural health threats related to environmental health hazards (e.g., floods, wet/dry seasons), cultural/traditional medicine, regional health structure, etc.
- Knowledge of Total Force concepts, AFMS Unit Type Code (UTC) capabilities, joint service deliberate and crisis action planning, and medical planning processes with USAF or DOD.
- Credentials, currency of qualifications, and competency in their primary career fields.

Furthermore, Air Force Tactics, Techniques and Procedures (AFTTP) 3-42.9, (Global Health Engagement and International Health Specialist Teams) describes how teams of IHS professionals and other AFMS GHE teams are assigned by DIMO and other facilitators to meet CCMD requests for GHE education and training.

Army

The Army is not among the organizations that manage DIMO, but it does provide personnel to CGHE (and its predecessor agency (CDHAM)) to execute its mission. Moreover, the Army has been involved in training and educating health care professionals to meet various GHE needs through other means. For example, the authors of [16] point out that of Army SG's (ASG) many responsibilities, three related to GHE education and training are described in Army Regulation 12-1 [AR 12-1, Security Assistance Training and Export Policy]. First, the ASG "directs, controls, and supervises individual medical training to foreign personnel to include development and staffing of medical training policy." Second, the ASG "validates, approves, synchronizes, and monitors training programs (formal courses, on-the-job training, and observer training in CONUS). This includes surveys and exportable training." Third, the ASG "serves as the Army POC on security assistance training and related health care policies and issues."

In addition, for many years, the Army has supported the missions of the Defense Medical Readiness Training Institute (DMRTI), a tri-service organization staffed by US Army, Navy, and USAF professionals that has also played a role in GHE education and training.[3] As of spring 2019, according to its website, DMRTI, located at Joint Base San Antonio (JBSA), Fort Sam Houston, Texas, offers resident and non-resident joint medical readiness training courses and professional medical programs. DMRTI offers courses in trauma care, burn care, joint medical

[3] See https://www.health.mil/About-MHS/OASDHA/Defense-Health-Agency/Education-and-Training/Defense-Medical-Readiness-Training-Institute.

operations, disaster preparedness, humanitarian assistance, and CBRNE preparation/response.

Although DMRTI has participated actively in GHE education and training in the past, DMRTI is not engaging in future GHE missions (according to our meeting with J7 Combat Support on 8 April, 2019). We describe DMRTI here to illustrate a critical role that Army has performed in GHE education and training in the recent past.[4]

Navy

The MOU between DSCA, DIMO, the USAF, and the Navy is central to the Navy's provision of GHE education and training, as is providing support to CGHE and its predecessor organization CDHAM. Also, like the USAF's development of the IHS specialty, the Navy has developed a global health specialist (GHS) program in 2017 to "…build a cadre of forward ambassadors and executors of the U.S. Navy's readiness and security cooperation mission."[17]. Navy active duty and reserve personnel from all Medical Department Officer Corps are eligible for membership in the GHS program.

To coordinate its support of DIMO and CGHE as well as other GHE education and training efforts, the Navy established the Office of Global Health Engagement (OGHE) in 2012. The head of the Navy OGHE directly reports to the Navy SG. According to [18], the Navy OGHE goals are as follows:

- Provide leadership with the strategic guidance in preparing and developing Navy Medicine personnel supporting Naval Forces as it relates to GHE
- Be the nexus for the synchronization and alignment with global partners for GHE efforts for Navy Medicine
- Be the primary advisor, strategic enabler, and leader for policy and guidance for GHE efforts for Navy Medicine
- Provide active community management of our expanding billet file by ensuring Global Health Specialist competencies are met by developing comprehensive education and training programs

Currently, Navy efforts to support DIMO and CGHE, along with other GHE-related activities, are coordinated through OGHE.

[4] The Army, Army Reserve, and the National Guard offer education and training in various aspects of GHE through other entities. We save a more thorough review of these programs, as well as those of the other services, for follow-on work that considers the bigger strategic imperative to improve coordination, efficiency, and effectiveness of *all* of GHE education and training across the services.

Uniformed Services University of the Health Sciences (USUHS)

USUHS provides global health-related education and training to prepare uniformed health professionals in support of the National Security and National Defense Strategies of the United States (this is accomplished primarily through CGHE).

Efficiency and effectiveness of GHE education and training

Various GAO reports point to lack of transparency of costs and effectiveness of various GHE or IMET-related programs [19-20].[5] Meanwhile, reference [4] documented the sheer volume of entities involved in the provision of medical services for our armed forces, including GHE education and training-related functions as of 2012. Reference [4] also provided an organizational chart describing the relationships of those entities to each other. Although the list of those entities has changed somewhat since 2012, it remains long, and mapping their relationships is still complicated. Resources flow through the system in a complicated manner, making it difficult to the monitor costs, benefits, and overall effectiveness of many activities.

Congress has shown concern about the potential lack of efficiency and effectiveness in GHE efforts, including education and training. Section 715 of the FY 2013 NDAA required the SECDEF and the ASD(HA) to address potential inefficiency and ineffectiveness.[6] We quote directly from the law to describe the requirement for SECDEF and ASD(HA).

> (a) IN GENERAL.—The Secretary of Defense, in coordination with the Under Secretary of Defense for Policy and the Assistant Secretary of Defense for Health Affairs, shall develop a process to ensure that health engagements conducted by the Department of Defense are effective and efficient in meeting the national security goals of the United States.
>
> (b) PROCESS GOALS.—the Assistant Secretary of Defense for Health Affairs shall ensure that each process developed under subsection (a)—
>
> (1) assesses the operational mission capabilities of the health engagement;
>
> (2) Uses the collective expertise of the Federal Government and non-governmental organizations to ensure collaboration and partnering activities; and
>
> (3) Assesses the stability and resiliency of the host nation of such engagement.
>
> (c) ASSESSMENT TOOL.—The Assistant Secretary of Defense for Health Affairs may establish a measure of effectiveness learning tool to assess the process

[5] Other studies point to similar challenges to estimating the costs of security cooperation activities more generally, such as [21].

[6] P.L. 112-239 (National Defense Authorization Act for Fiscal Year 2013)

> developed under subsection (a) to ensure the applicability of the process to health engagements conducted by the Department of Defense.
>
> (d) HEALTH ENGAGEMENT DEFINED.—In this section, the term ''health engagement'' means a health stability operation conducted by the Department of Defense outside the United States in coordination with a foreign government or international organization to establish, reconstitute, or maintain the health sector of a foreign country.

Since then, additional analysis describes ongoing challenges for DOD in streamlining its provision of GHE, including GHE education and training. Specifically, the authors of [16] describe how ongoing inefficiencies plague GHE education and training using an example of the Indo-Asia Pacific region and the Army.

> Despite significant investment, the lack of standardization in how GHE [operations, activities and actions] OAAs are executed results in fragmented programs that may not develop the health capability or increase the capacity of our partner nations (PNs) within the region. For example, the basic first responder (BFR) course has been conducted using various programs of instruction by different Services throughout the Indo-Asia Pacific region. The Air Force and Army National Guard also conducted BFR courses through the State Partnership Program using different programs of instruction. As a result, the lack of standardization in delivering the same course leaves partner nations in the region confused. Both military and civilian partners are left to assemble the training pieces that vary by doctrine and application, which may generate reputational risk for DOD. Additionally, variation of the same course among our own Services makes it difficult to build interoperability with our partner nations. There may be a need for some variation in course content to account for conditions that may differ between regions. However, a standard from which each of the Services, to include the State Partnership Program, can adapt and deliver predictable training to a partner nation is essential.
>
> Lacking a common approach also makes it difficult for DOD and partner nations to track progress toward achieving learning objectives over time. As such, DOD and partner nations become co- dependent to teach BFR year after year. Furthermore, thinking through the next building blocks of partner-nation medical capacity is often overlooked. This myopic approach to conducting BFR annually using various programs of instruction consumes resources that could be spent on developing the next higher level of capability such as Advanced Trauma Life Support in support of a United Nations–level one or two deployable hospital.[7]

[7] The authors of [16] also recommend a way forward for the Army to support GHE OAA. Specifically, "a review of Army medical doctrine led to the development of three Army [health lines of efforts] HLOEs based on 10 doctrinal medical functional areas (FA)." The three HLOES are health system support, health service support, and force

This sentiment set the stage for the request in the FY 2019 NDAA to examine the consolidation of DIMO and CGHE.

health protection. The 10 functional areas (FAs) that the authors list are combat and operational stress control, combined information data, casualty care, dental services, laboratory services, medical evacuation, medical intelligence, medical logistics, mission command, preventive medicine and veterinary services. Their proposed way forward for the Army is informative but is beyond the scope of specific application to an examination of consolidating DIMO and CGHE.

Methodology

Attributes of an ideal GHE education and training organization

The ideal GHE education and training organization begins with a clear demand (based on requirements) signal from CCMDs about GHE activities in general and GHE education and training activities in particular. The clear requirements then must be validated and prioritized by an established authority; in the case of GHE education and training, that is the Joint Surgeon's office. This provides common visibility on the demand for all GHE-related activities, particularly education and training activities, and its demand from the military health system (MHS). The absence of such a system forces CCMDs to farm out their requests to a number of different organizations, causing lack of visibility on the whole of the demand for GHE education and training requirements on the military health system and increases the risk of the requirements being filled inefficiently or not filled at all. It also results in a lost opportunity for global integration and efficient global force management.

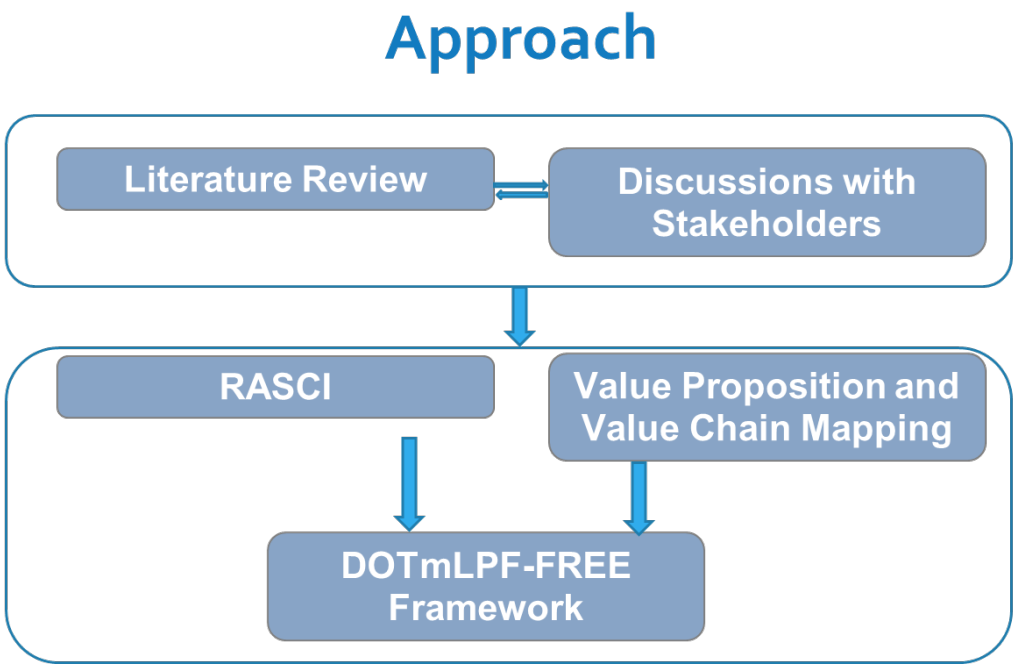
Once the demand signal for GHE education and training has been centralized, there needs to be optimal resourcing to fill the requirements. This includes appropriate budget planning to ensure CCMD requirements for GHE E&T can be met over a period of time, generally three to five years.

Finally, the current resource-constrained environment needs a joint organization that can efficiently meet the demand signal of the CCMDs for GHE education and training.

The current state of GHE education and training provided by DIMO and CGHE

To assess the current state of education and training provided by DIMO and CGHE, we took the following approach:

Figure 5. CNA approach



Source: CNA.

We conducted a literature search, which informed us of the history, mission, vision, and other related information about both DIMO and CGHE. We also researched the education and training related to GHE in the DOD. In addition, the literature search informed us of the stakeholders to include in discussions. We interviewed over 35 stakeholders and subject matter experts (SMEs) to gather background information, views of the current status of DIMO and CGHE, and views on consolidation. Some of the stakeholders provided us with documents not readily available. Lastly, it helped select the methods of organizational study.

Next, we conducted value proposition, value chain mapping and RASCI (responsible, accountable, sourcing/supporting, consulted, and informed) of DIMO and the training and professional development directorate of CGHE. Together the RASCI, Value Proposition and

Value Chain Mapping help us understand how the organization functions, where efficiencies can be gained, and what challenges can be anticipated.

We looked at the findings through the lens of DOTmLPF. We included additional attributes of FREE (funding, relationship, effectiveness, and efficiency) the DOTmLPF framework.

Data

We requested the following data from DIMO and CGHE:

Funding – Sources, amounts, and trends

Manning – Military, civilian, and contractor

Workload – Training courses delivered

Findings

Organizational attributes of DIMO and CGHE:

From the literature, discussions with officials and data provided by the DIMO and CGHE we compared the important attributes of the two organizations as presented in the table below:

Table 1. Comparison of attributes of DIMO and CGHE

	CGHE	DIMO
Function	Training and professional development; Assessment, monitoring and evaluation; Research; Program and joint force support	Education and training
Geographical location	North Bethesda, MD	San Antonio, TX
Manning	4 (training and professional development Directorate)	24
Funding for training function	Defense Health Program	Multiple sources
Courses taught	4	44
Audience	U.S. military	International military

Source: CNA.

As noted in Table 1, CGHE conducts a number of other functions in addition of training, while DIMO's sole function is to provide training. In addition to difference in the audience trained, CGHE and DIMO have different funding sources. While the CGHE's training offering is limited to 4 courses, DIMO offers 44 courses. One of the important attribute to note is the geographical locations of these two organizations.

RASCI:

We generated a RACI matrix of two DIMO training departments (Medical Operations and Medical Programs) and the CGHE Training and Professional Development Directorate. We present the RACI matrix below (tables 2-4) from the input and viewpoints of the personnel filling the positions.

Table 2. RACI matrix – Medical Programs

6 FTES	Branch Chief	Academic Advisor	Infectious Disease Specialist	Critical Care Nurse	Quality	Curriculum DBA
Instructor Selection/ Development	R A	R A	R A	R A	R A	R
Curriculum Development	R A	R A	R A	R A	R A	R
Academic Oversight				R		
Quality Improvement					R	
Country Specific Program Design	R A	R	R	R	R	R

Source: CNA

Responsible Accountable Consulted Informed

Table 3. RACI matrix – Medical Operations

9 FTES	OPSO	Flight Chief	Program Managers (2 FTEs)	Mission Specialists (4 FTEs)	Resident Course Coordinator
Program Management	A C	A C	R C	C	C
Mission Specialists Activities	A C	A C	C	R C	
Resident Courses	R C	R C	C		R C
IMSO Activities	A C	R C	C	C	C
Course Director	R A C	R	C	C	
Curriculum Development	R				
RFS Process	R C	R C	C	R C	
Course Management	A C	R A C	R C		

Source: CNA.

Table 4. CGHE TPD Directorate RACI

5 FTES	Director	Deputy Director	PM	Curriculum Specialist	Curriculum Manager
Curriculum development	R A	R	R	R	R
FOGHE POC	A				R
Professional Development POC	A		R		
GHSS POC	A		R		
Bushmasters POC	A			R	
MCM	A			R	

5 FTES	Director	Deputy Director	PM	Curriculum Specialist	Curriculum Manager
Women's Peace and Security	A				
Tailored Trainings	A				
Exercises	A				
MMHAC-adopting to AF audience	A	R			
Manage regional instructors for MMHAC	A	R			
APRAP-International Version	A	R			
Distance learning for graduate certificate courses	A		R	R	
MPH-GH concentration	A		R		
Bushmaster-build out GHE tract for the given scenario, train role players	A				

Source: CNA.

Value Proposition and Value Chain Mapping:

Below we present value proposition and value chain map of the medical programs and medical operations and TPD, CGHE. The value proposition shows what the entity does and value chain show who does and how.

Medical Programs:

Value Proposition: Course development, instructor recruiting and retention, course delivery, marketing and quality assessment

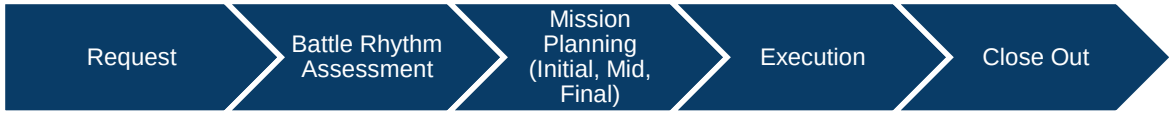
Value Chain mapping:

• Administrative paperwork (E-J Met, MSSL, Foreign Disclosure	• Literature Review • Writing • Feedback	• One page white paper • Course Catalogue • Notice to Embassy, Security Offices	• Create daily activity schedule	• Scheduled and Ad hoc Review and Updates • Tailor to country

Medical Operations:

Value Proposition: Plan and execute medical education missions

Value Chain Mapping:



• Administrative paperwork • Liase with internal departments (Medical Programs and Administration) • Determine manpower needs	• Assign Mission Specialist • Formal introduction to country POC	• Country Liasing • Assemble team • Travel Logistics • Supplies • IT Checks • Funding • Dates • Request for Support • Curriculum Adjustments	• Tracking Team and Mission Specialist	• All personnel back • Supplies returned • Travel Vouchers

RACI findings:

DIMO

Ideally, in an organization, the people should know their exact roles. When there is a shared job, role, or responsibility, there should be as much clarification as possible among the people sharing the responsibility. In case of DIMO, the input we were given led us to conclude that there is responsibility overlap or lack of clarification, which causes confusion and contention about roles. We also noticed that there is ownership pride of training courses and tendency to promote "proprietary" nature. These two observations might detract from teamwork. Silos within and between departments may be reducing cooperation and collaboration, creating missed opportunities for efficiency. A single person in each organization carries out academic oversight and quality improvement functions, which may become a single point of failure. Contract employees occupy critical positions, such as mission specialists. During the change in fiscal year, this poses a problem: contract workers have to be let go and rehired at a later point when a new contract is in place. This adversely affects continuity of missions over the change in fiscal year.

TPD, CGHE

The TPD, CGHE is a small directorate in which staff members share responsibility and functions. There seems to be an emphasis on teamwork and collaboration. Military staff carry out the critical functions. Additionally, course development and review is a collaborative effort between the whole staff, plus occasional SMEs from outside the center.

Value chain findings

While gathering input for value proposition and value chain mapping, we recognized three opportunities. DIMO functions on a "mobile training team concept." The instructors and SMEs are volunteers, mainly for DOD. Consistent instructor and SME availability therefore is a challenge. DIMO's challenge with instructors and SME availability could be solved by access to the USU faculty, including the pool of adjunct professors. DIMO has an internal process for vetting the volunteer instructors. This DIMO instructor vetting process could benefit from combining with USU's adjunct faculty vetting process and may realize some efficiency. Finally, after a training course is delivered, DIMO has to follow up to track the equipment and conduct inventory. It invests a lot of time and effort in doing so. DIMO could benefit from robust inventory tracking processes and tools.

DOTmLPF analysis

We looked at our cumulative observations and information through the lens of DOTmLPF and added attributes of FREE. Below we present the findings in DOTmLPF-FREE framework:

Doctrine

Neither CGHE nor DIMO are chartered or required by Title 10. The three-party 2015 MOU (Defense Security Cooperation Agency (DSCA), USAF, and Navy), the only document formalizing DIMO, expired in 2018 and Navy Medicine has decided not to sign the MOU going forward. Across the MHS, there is a lack of overarching framework for GHE-related education and training.

Organization

GHE training and education activities are distributed throughout DOD. CGHE sits higher in the organization hierarchy; the CGHE Director reports directly to the USU President. Comparatively, the DIMO is buried down in a service. Another observation is that the GHE activities related education and training are conducted by disparate organizations of the DoD.

Training

We focused on the training of the personnel performing the education and training functions at TPD, CGHE, and DIMO. The USAF has an International Health Scientist (IHS) Program with specific training and experience requirements. The Navy has a Global Health Specialist (GHS) Program with on specific requirements for training. Thus, the USAF and Navy military personnel have opportunity to acquire the GHE-related skill sets as part of the workforce serving in DIMO and TPD, CGHE positions. The civilian and contract personnel who have been working at DIMO have accumulated institutional knowledge and experiences that make them valuable for the organization.

Leadership

The leaders of the TPD, CGHE and DIMO are generally selected from the IHS or GHS community and are trained and experienced in GHE but not consistently so. In general, the DOD lacks comprehensive formalized leaders' education for GHE.

Personnel

Both CGHE and DIMO do not have an authorized manning document. TPD, CGHE is manned by military and contract personnel, while DIMO is manned by military, civilian, and contract personnel.

As the training missions have grown, there has been ad-hoc growth in manning. To accommodate and execute the increased training missions, DIMO has had to use borrowed

labor in form of Navy enlisted service members. However, as of the writing of this report, the Navy has decided not to renew the three-party agreement with USAF and DSCA. The Navy also plans not to fill the three Navy billets. However, Navy will support request for forces to support the mobile training team of the DIMO.

Facilities

CGHE is located a civilian-leased facility, while DIMO is on Lakeland Air Force Base. The geographical locations of the facilities do not have a major bearing, except that the CGHE's location would be more expensive that DIMO's. The DIMO's facilities are not optimal, while CGHE's facilities are adequate. Both have geographically distributed facilities from their respective headquarters, with DIMO at a greater distance away from its headquarters. Both TPD, CGHE and DIMO conduct trainings in leased facilities or on DOD installation, inside and outside of the continental US.

Funding

TPD, CGHE is funded by a single funding source—USU. DIMO is funded by disparate funding sources, which require robust processes and familiarity with processing of a variety of funds. This presents challenges for DIMO. DIMO needs diligent support from its parent organization to handle different funding streams—DSCA and the USAF. The USAF also provides manpower and facility support. The rest of the funding comes from reimbursable sources. DIMO works on a "first in, first out" business model fulfilling training missions of the organizations that fund it first. This model is risky for DIMO and DOD. The priority of training mission fulfilled should be decided by an existing process that validates and prioritizes the CCMDs' requirements.

Relationships

Due to the longevity of DIMO's existence and since it has been executing GHE training missions for a long period of time, DIMO has formed relationships with CCMDs and Security Cooperation Officers (SCO), which are important to preserve. The same is true for the relationships with various ministries of defense and health; however, these relationships need to be managed closely.

Effectiveness

Organizational efficiency of both organizations is hard to measure because of lack of metrics.

In general, there is a lack of assessment, monitoring, and evaluation of DOD GHE activities, including international military training. During our discussions, we gathered that there is difficulty in conducting surveys due to language barriers, cultural differences, and norms.

Another unrelated challenge regarding effectiveness is that DIMO is not funded for instructor training, hence it is hard to grow effective instructor pool.

Efficiency

DIMO faces challenges such as mission cancellations, which waste resources. It is important to note that the mission cancellations are sometimes due to circumstances beyond DIMO's control, such as unstable conditions in the partner nation, increased security risk or political reasons. A number of functions at DIMO are carried out by multiple people or teams and though we did not analyze all the processes, we believe that DIMO may benefit from evaluation of internal processes. The quality improvement and academic oversight functions at DIMO are carried out by a single person each, which may become a single point of failure if the position is not filled or the position is being gapped.

Feasibility of consolidation and integration of capability

We conclude that despite of the differences in who they train, what they train in, and how they are funded, it is feasible to integrate CGHE and DIMO. We did not find a compelling reason or requirement that necessitates independent existence of these two organizations. We looked at various organizations within the DOD, in addition to CGHE, with which DIMO could be integrated and vice-a versa.

Revisiting attributes of an ideal organization for GHE education and training

From our discussion with the stakeholders it is abundantly clear that GHE-related training is a vital and valuable function and the capability to provide the education and training must be preserved in the DOD. However, the GHE-related education and training is being conducted by disparate organizations within the DoD.

We submit that maintaining GHE education and training capabilities requires a joint organization that is resourced consistently and has robust internal and external processes to function effectively and efficiently is what is needed to help meet the CCMDs requirements and to ultimately meet the objectives of the campaign plans. CGHE is already a joint center, is resourced consistently, and has benefit of the relationship with a university, with the Henry Jackson Foundation (HJF) able to hire personnel. DIMO could certainly benefit from jointness, consistent funding, and the ability to hire personnel through HJF. However, there are sufficient differences between the two organizations and a geographical move of DIMO will result in loss of key personnel and loss of institutional knowledge. Therefore, we considered other organizational options.

Challenges to integration and consolidation

The biggest challenge to consolidation and integration of the capabilities of DIMO and CGHE is the impact to the DIMO's mission. DIMO's ongoing mission can be adversely affected by geographical relocation. The majority of civilian and contract workers are unlikely to move from San Antonio. A geographical move would most likely result in loss of institutional knowledge and expertise. After ruling out the geographical move, the next challenge is the hiring of the contract personnel through a mechanism that allows for continuity of the mission. The third challenge is established processes to handle various funding types in an efficient and timely manner. Finally, advocacy of DIMO to a higher level and financial stability with consistent long-term funding are standing challenges regardless of consolidation and integration.

Mitigation strategies

To mitigate the adverse impacts on DIMO's mission we recommend that (1) DIMO is not geographically relocated, (2) robust processes are put in place for accepting and processing various types of funding, and (3) a mechanism for hiring of personnel is put in place.

Planning and timeline considerations

DIMO has developed an annual projected training calendar for 2020. We highly recommend engaging DIMO's leadership and finding a window of time least disruptive to ongoing training missions. We also advocate for all processes being in place before the consolidation and integration.

Recommendations

We offer three courses of action (COA) for consideration. The three COAs are based upon meeting the attributes of an ideal organization and the willingness of the organizations' leadership to accommodate DIMO's move.

COA 1 – DIMO moves under USU-S

Moving DIMO under USU-S puts in under the same larger organization as CGHE, the USU. USU-S leadership has long-term familiarity with DIMO and is very supportive of DIMO's mission. USU-S can utilize the HJF relationship and provide stable workforce for DIMO. USU-S has authority to receive funding and will be able to support DIMO receiving funding from various sources. Additionally, DIMO will have access to USU accredited faculty for its instructor pool and the faculty vetting process for vetting the instructors from non-USU organizations within DOD. The only challenge is that USU is not an operational unit. In our view, this does not pose an unsurmountable obstacle on DIMO's mission.

COA 2 – Status quo – DIMO remains under the Air Force

With Navy's withdrawal from the three–party MOU, DIMO essentially become a service organization. Under the USAF, DIMO will not be in a joint environment, will not have a higher level of advocacy, and will continue to face same challenges of inadequate funding acceptance processes and contracting processes. Also, as DIMO's missions and therefore the costs increase, the cost to the USAF as a service will increase.

COA 3 – DIMO moves under Combat Support, Defense Health Agency

DIMO's move under the Combat Support (CS) makes it a joint organization. The Defense Medical Readiness Training Institute is under CS but is geographically separate in San Antonio. It is possible to follow suit for DIMO. However, This COA does not address the processes of funding acceptance and does not allow hiring of personnel under the HJF, since Combat Support does not have a relationship with HJF comparable to the one USU has. Some of the stakeholders expressed concern over DIMO's needs for processes and over the possibility of DIMO being prioritized below the need for the Combat Support to focus on the Combat Support Agency Review Team (CSART) recommendations and other transitions occurring within DHA and military health system.

Appendix A: MOU between DSCA, AFMS, and BUMED Regarding DIMO

Some additional information includes DIMO's approach to achieving its stated mission:

- The approach is to
  - Work with other DOD and US government agencies in a while-of-government approach in the development and execution of medical education and training courses in support of Department of State objectives and Combatant Commands' (CCMDs') Theater Campaign Plans (TCP).
  - Strengthen partner nation medical capabilities primarily through overseas Mobile Training Team (MTT) engagements and train-the-trainer, regional and multinational cooperative format
  - Develop and execute focused medical education and training courses for foreign military and government personnel as requested by Security Cooperation Officers, CCMD SGs or their appropriately-authorized staff, coordinated through DSCA.
  - Leverage subject matter experts (SMEs) from within DOD, other US government agencies, and appropriate non-governmental entities as instructors, course directors, and MTT members for the delivery of course in partner nations.

In addition, the Director of DSCA

- Provides policy guidance to the Director, DIMO for IMET/E-IMET and other Security Cooperation related programs as appropriated, to ensure DIMO's program formulation, development, and execution meet Congressionally-mandated United States security assistance objectives. This includes certifying and recertifying applicable DIMO courses to ensure compliance with E-IMET objectives, and synchronized with overall DOD security cooperation activities and priorities.
- [DSCA] provide[s] funds for DIMO activities as appropriate, when requested by the Department of State (DoS). These funds are typically allocated as IMET and E-IMET funds to conduct international health education and training activities that DoS determines will advance international medical education and training for countries throughout the world, as appropriate, and in accordance with IMET and E-IMET objectives.

- Conduct periodic program reviews. This will include financial regulatory compliance reviews, course topic reviews, but not subject matter or clinical quality assurance reviews.

In addition, the USAF SG

- Nominate a potential qualified candidate for the DIMO Director position in concurrence with the Navy SG.
- Ensure DIMO is adequately manned to support core mission through the deliberate Program Objective Memorandum (POM) process and balance of risk in resources across the needs of the AFMS.
- Provide certain full-time equivalent (FTE) civilian positions
- Coordinate with the Navy SG to determine long-term manpower and budgetary requirements and support for DIMO.
- Delegate an executive agency to exercise Command for personnel assigned to DIMO in coordination with Navy SG.
- Support the DIMO Director as the AFMS principal contact for international medical education and training courses in support of DOD security cooperation objectives. Facilitate collaboration between the DIMO Director, the International Health Specialist Program Director, and DSCA for international engagement planning.

In addition, the US Navy SG

- Nominate a potential qualified candidate for the DIMO Director position in concurrence with the AF SG.
- Assign three Navy (2 officers/1 enlisted) billets to DIMO, to include the Director if a Navy O-6 serves as Director, or Deputy Director if an AF O-6 serves as Director.
- Coordinate with the AFSG to determine long-term manpower and budgetary requirements and support to DIMO.

Appendix B: Other Entities Involved in GHE Education and Training

There are a number of military health system organizations that conduct GHE-related education and international military training. The examples below do not constitute an exhaustive list.

DMRTI – The mission of DMRTI is to enhance operational and sustainment capabilities through joint, interagency, intergovernmental, and multinational medical training. While aligned under DHA, DMRTI is a Tri-Service organization staffed by medical professionals from all three services, DOD civilians, and contractors, offering resident, non-resident, and distance-learning medical readiness courses, with the goal of improving coordination of readiness training efforts between military and civilian organizations.

Army School of Nursing – Offers programs to the International Military Community through the International Military Education Training Program (IMET) and Foreign Military Sales (FMS), US Army Security Assistance Training Field Activity (SATFA), and the US Army Medical Department Center and School (AMEDDC&S).

Appendix C: National Health Security Strategy and Global Health Security Agenda (GHSA)

Reference [11] outlines the most recent National Health Security Strategy (NHSS). It is produced by the US Department of Health and Human Services Assistant Secretary for Preparedness and Response and aligns with and supports numerous national strategies, including those for security and defense. The NHSS provides a vision for strengthening the "nation's ability to prevent, detect, assess, prepare for, mitigate, respond to, and recover from 21st century health security threats." It contains three main objectives:

1. Prepare, mobilize, and coordinate the whole-of-government to bring the full spectrum of federal medical and public health capabilities to support state, local, tribal, and territorial (SLTT) authorities in the event of a public health emergency, disaster, or attack.
2. Protect the nation from the health effects of emerging and pandemic infectious diseases and chemical, biological, radiological, and nuclear (CBRN) threats.
3. Leverage the capabilities of the private sector.

"HHS and DOD collaboration builds on their respective longstanding research programs to accelerate identification of potential MCM candidates against a range of diseases."

The NHSS in turn is accompanied by the US Health Security National Action Plan, which provides more specific strategic guidance for achieving the NHSS [11].

In addition, strategic guidance that provides context for DOD GHE education and training is also informed by the Global Health Security Agenda.

- Global Health Security Agenda (GHSA)
  - About: "The Global Health Security Agenda (GHSA) was launched in February 2014 to advance a world safe and secure from infectious disease threats, to bring together nations from all over the world to make new, concrete commitments, and to elevate global health security as a national leaders-level priority. The G7 endorsed the GHSA in June 2014, and Finland and Indonesia hosted commitment development meetings to spur action in May and August."
  - Membership: "GHSA was launched in February 2014. Since then, membership in GHSA has grown to include over 50 countries, each committed to leading or

contributing to one or more Action Packages. GHSA is coordinated by a multilateral Steering Group of 10 countries: Canada, Chile, Finland, India, Indonesia, Italy, Kenya, Kingdom of Saudi Arabia, Republic of Korea, and the United States. WHO, FAO, OIE, and other international organizations serve as advisors to this Steering Group."

Figures

Tables

Abbreviations

AFMS	Air Force Medical Service
AFMSA	Air Force Medical Support Agency
AFTTP	Air Force Tactics Techniques and Procedures
ASD/HA	Assistant Secretary of Defense/Health Affairs
BUMED	Bureau of Medicine and Surgery
CCMD	Combatant Command
CDHAM	Center for Disaster and Humanitarian Assistance Medicine
CGHE	Center for Global Health Engagement
DASD (HRP&O)	Deputy Assistant Secretary of Defense (Health Research Policy and Oversight)
DHP	Defense Health Program
DIMO	Defense Institute for Medical Operations
DOD	Department of Defense
DOS	Department of State
DSA	Directorate for Security Assistance
DSCA	Defense Security Cooperation Agency
E-IMET	Expanded International Military Education and Training
GHE	Global Health Engagement
GHS	Global Health Specialist
GHSA	Global Health Security Agenda
HASC	House Armed Services Committee
IHS	International Health Specialist
IMET	International Military Education and Training
JBSA	Joint Base San Antonio
JCIDS	Joint Capability Integrated Development System
JP	Joint Publication
MHS	Military Health System
MILDEP	Military Department
MRSP	Mission Resource Strategic Plan
MOU	Memorandum Of understanding
NDAA	National Defense Authorization Act
NDS	National Defense Strategy
NHSS	National Health Security Strategy
NSS	National Security Strategy

PN	Partner nation
SAMM	Security Assistance Management Manual
SCO	Security Cooperation Officer
SECDEF	Secretary of Defense
SME	Subject matter expert
USAF	United States Air Force
UTC	Unit Type Code
TCP	Theater Campaign Plan
USAFSAM	United States Air Force School of Aerospace Medicine
USU	Uniformed Services University
USUHS	Uniformed Services University of Health Sciences

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