U.S. Air Force nurse assigned to 18th Operational Medical Readiness Squadron talks with other medical personnel while participating in simulated mass casualty aeromedical evacuation during exercise Cope North 21, at Northwest Field, Guam, February 10, 2021 (U.S. Air Force/Duncan C. Bevan)

Thrust and Agility from Trust and Antifragility

A Combatant's Guide to Expeditionary Medical Leadership

By James A. Chambers

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According to Mihnea Moldoveanu and Das Narayandas, leadership development represents an increasingly critical component of national readiness, and its importance is not restricted to the military. Moldoveanu and Narayandas assert that businesses in the current "volatile, uncertain, complex, and ambiguous environment . . . need leadership skills and organizational capabilities different from those that helped them succeed in the past."[1] Specifically, modern training should increasingly emphasize individual initiative, relational and communication skills, and organizational

capabilities. Moldoveanu and Narayandas note traditional training succeeds in several domains of cognitive development but is "far less [useful] in teaching people how to communicate and work with one another effectively."[2]

In 2018, Chairman of the Joint Chiefs of Staff General Joseph Dunford outlined changes in the character of war and strategic landscape.[3] He asserted that operations in multiple domains, relative loss of air superiority, less reliable logistics, cyber degradation, increased dependence on host-nation support, novel or more effective weapons, and medical consequences in the future mean the "decision space has collapsed."[4] He stressed that Department of Defense (DOD) planning must enable "execution of military campaigns with flexibility and speed that outpaces our adversaries."[5] General Dunford concluded his assessment emphasizing the need to optimize how future teams are led: "We must further develop leaders capable of thriving at the speed of war—leaders who can adapt to change, drive innovation, and thrive in uncertain, chaotic conditions. The nature of war has not changed, and, in a violent clash of wills, it is the human dimension that ultimately determines the success of any campaign."[6]

Compared with the business world of Moldoveanu and Narayandas and in-garrison medicine, expeditionary medicine is distinguished by several factors. These include exposure to significant physical risk, diminished resources (including potential cyber degradation), a compressed time cycle, fewer options for timely referral for complex cases, and a higher expectation of relatively inexperienced personnel to care for patients suffering from polytrauma or chemical, biological, radiological, nuclear, or explosives (CBRNE) injuries than at home stations and in higher volumes. In short, the stakes are often higher for both the provider and the patient in austere, ambiguous, and volatile settings.

Appropriately, in the past 2 years, each military department has begun modernizing expeditionary medical platforms, including materiel, team composition, and clinical care training.[7] To meet the increasing need for agile decisionmaking and care, U.S. military medical care will need to deepen abilities to serve as a "team of teams," linking combatant commands, component commands, and fielded medical teams, oiled by the trust of shared intelligence, perspective, and strategic intent that empowers responsive tactical decisionmaking and executions. Relatively isolated medics in austere conditions may be required to provide care at a level for which they have not been historically trained or expected to manage and dependent on a network to provide consultation and assistance. In parallel, expeditionary medical leaders need to enhance their abilities to adjust to rapidly changing scenarios.

Boyd's Observations on Combat Advantage

A Korean and Vietnam War veteran and engineer, John Boyd pioneered the development of modern fighter aircraft, guided by goals to "out-accelerate, outturn, and out-endure any existing aircraft in the range of speeds actually seen in combat."[8] All three parameters are also relevant for expeditionary medical care. Boyd observed, "The outcome of combat is determined not by the bigger cannon or even by the larger force, but by the *shrewdest combination of equipment, training, and ideas toward the end of adaptability.*"[9] This article advocates for the shrewdest combination of approaches to field high-reliability medical teams led by well-prepared professionals, and it also examines *thrust* and *agility* (General Dunford's "speed" and "flexibility") as they apply to medicine and recommends actions that enhance *sustainability* as well.

Fighter Performance Parameter: Thrust

Boyd determined that of the top four design goals for an air-superiority fighter, the most important was to obtain the first sighting of the enemy. In order, the other three were to outnumber the enemy, outmaneuver the enemy, and achieve split-second kills.[10] Thrust supports the pilot's ability to rapidly see, identify, and engage enemy targets. Boyd's (with Thomas P. Christie) 1966 energy-maneuverability (EM) theory provides the mathematical basis for his well-known observe, orient, decide, act (OODA) loop. EM theory calculates the energy state of an aircraft to quantify aircraft performance and uses the thrust-to-weight ratio as a proxy for ability to accelerate and engage targets.

Fighter Performance Parameter: Agility

History teaches that agility—that is, the ability to rapidly transition from one maneuver to another—is an enabler for victory. Boyd's 1966 paper on EM theory indicates that, to effectively maneuver, a pilot must understand factors intrinsic and extrinsic to the aircraft and be able to adjust priorities.[11] EM theory uses wing loading (aircraft mass/wing surface area) as a proxy for maneuverability.

Aircraft with low-wing loading (that is, an F-15) tend to have superior sustained turn performance because they can generate more lift for a given quantity of engine thrust. In contrast, aircraft with high-wing loading (that is, an F-16) typically provide excellent instantaneous turn performance but poorer sustained turn performance. In other words, planes that nimbly respond to control input and resist wind gusts are often unable to sustain tight turns. Thus, wing loading is a tradeoff between stability (the ability to sustain intended performance when change is imposed by the pilot or challenged by the external environment) and agility. It should also be stressed that a plane's inherent agility depends on the pilot's ability to "read" the environment and the aircraft's reactions in real time. Boyd's term for this is *Fingerspitzengefühl* (German for "finger tips feeling").[12]

Expeditionary Force Performance Parameter: Trust

In *Team of Teams*, General Stanley McChrystal cites wisdom from the Harvard Business School: "Great teams consist of individuals who have learned to trust each other . . . enabling them to play as a coordinated whole."[13] Boyd's biographer similarly notes command-

Sailors aboard Military Sealift Command hospital ship USNS *Mercy* clear tie-down equipment from MV-22B Osprey assigned to Air Test and Evaluation Squadron 21 of Naval Air Station Patuxent River, Maryland, on ship's flight deck, April 18, 2020, Pacific Ocean (U.S. Navy/Luke Cunningham)

ers can fully exploit opportunities only when subordinates understand their intent (*Schwerpunkt*) and are empowered to execute it. Both commanders and subordinates share a common outlook and trust, "the glue that holds this apparently formless effort together."[14]

Fighter pilot General Wilbur Creech was born the same year as Boyd, fought in the same wars, and shared the same value for trust, derived from one's perceived intent and capability. Creech insisted leaders groom other leaders through careful selection and mentoring.[15] He dramatically improved Tactical Air Command's efficacy, quality, and safety record by training small teams as they would fight together and emphasizing clear communication and expectations as well as instilling a decentralized control philosophy.[16] He engendered confidence through realistic training. Creech expected his leaders to be lead performers; wing commanders routinely flew with their teams to demonstrate technical proficiency. He insisted that to achieve lasting change, ideas and doctrine had to be developed in parallel with advances in equipment and training as well as organization and leadership.[17] These precepts also apply to expeditionary medicine.

Expeditionary Force Performance Parameter: Antifragility

The U.S. military has appropriately focused on increasing individual and unit resiliency in recent years. Especially for deployed units, antifragility is an even more compelling aim. According to Nicholas Taleb, fragility implies suffering or destruction from volatility, whereas resiliency enables continuity in a disruptive environment. Taleb coined the term *antifragile* to indicate that which actually improves rather than weakens or simply returns to status quo after adversity.[18] Taleb asserts that antifragility is increased by:

- sticking to simple rules
- building layers of redundancy
- looking to exploit changes in the environment
- paying heed to only those with "skin in the game"
- tinkering: high volume of experiments to learn through small errors for potentially large gains
- avoiding risks that would result in complete destruction
- keeping options open
- respecting habits and rules that have endured for a long time
- avoiding overplanning; build in intent to adapt.

Taleb uses tinkering to create heuristics—"simple, practical easy-to-apply rules of thumb that make life easy"—to help make rapid decisions.[19] Heuristics are designed to be expedient, not perfect; users need to remember they are using a shortcut rather than trying to absorb all the information in a time-constrained environment.[20] Antifragility thrives when team members embrace making numerous small mistakes as a learning process. Taleb stresses that cultures that value bottom-up responsiveness and ownership thrive under stress and disorder, whereas excessive top-down control can increase fragility and hinder growth.[21] Antifragile thinkers can function with ambiguity, incomplete information, and acknowledgment of limits on one's understanding.

Application

The remainder of this article examines analogous performance parameters for effective medical leadership in deployed settings. Changes in technology and the operational battlespace create new challenges and opportunities for expeditionary medical care, an environment in which thrust and agility are increasingly important to achieve.

Expeditionary Medical Performance Parameter: Thrust from Trust. The *thrust* of a deployed medical team enables it to—like a fighter aircraft—quickly deploy, understand, and respond to initial conditions. It is degraded by lack of autonomy, excessive bureaucratic control, inadequate information and connectivity, poor logistics, and insufficient confidence. To generate thrust from trust, medical leaders need to believe in their mission and unit competence, and team members need to believe in their leader's abilities and intent; leaders need to be manifestly proficient and out front.[22] For millennia, leaders have inspired teams by demonstrating excellence and self-sacrifice, or at least the willingness to take personal risk on behalf of a shared goal.[23] Trust is enhanced by leaders' respect for others, fairness, and ability to achieve meaningful if small early wins for the team. Trust is reinforced by a leader's equanimity, the dispassionate focus and calm in the face of adversity that Sir William Osler hailed as the supreme quality of effective medical professionals.[24] Levelheadedness dissipates the friction of anxiety and facilitates data-driven decisions, inspires confidence, and will be drawn on during times of personal or institutional transition as well as physical and professional risk. It varies among individuals' constitutions but can be strengthened by training and experience in appropriately stimulating environments.

Expeditionary Medical Performance Parameter: Agility from Antifragility. The *agility* of a medical group is most affected by judgment and culture. An immediate and intuitive understanding of how to prioritize and sequence medical resources at both individual and population levels enables teams to rapidly maneuver. A strong clinical background requiring responsibility for outcomes can provide some advantage, but the keys that engender success are mutual respect and open communication between the commander and the frontline clinicians, as well as preparing medics to take on roles they are not required to fill in garrison, providing depth, redundancy, and resiliency for small-footprint teams. Leaders require skills in anticipating, detecting, diagnosing, treating, and rehabilitating problems in team performance just as clinicians do for individual patients' health.

Commanders need to gain Boyd's *Fingerspitzengefühl* to attain the utility of his OODA loop. This ability to read the environment and immediately apply appropriate reactions is obtained by getting to know the team both as individuals and in terms of their organizational strengths, weaknesses, and daily challenges. Teams need to work together and communicate often and openly, both internally and with outside organizations, and, when appropriate, up their chain of command. When crises erupt, less time will be needed to explain the rationale and priorities for teams that have trained and worked intensely together.

Effective leaders deliberately establish culture. They advance antifragility by delegating authority and decentralizing execution, empowering frontline teams to rapidly respond. They aggressively seek improvement and celebrate learning from small failures. Leaders who proactively engage host-nation, coalition nation, and other partners to identify and achieve shared goals are also more likely to survive turbulent times. This includes becoming acquainted with other's capabilities and resources, from protocols to materiel. Deployed medical teams with small footprints depend greatly on external resources from the U.S. Government, host-nation, and, potentially, coalition partners; meaningful joint and international exercises should routinely test communication pathways, transportation platforms, and medical capabilities—especially patient care handoffs—to strengthen interoperability and procedural knowledge tailored to prioritized threats. Basic field medical skills such as nine-line reports, litter carries, and stanchion loading should be practiced by every team member, regardless of rank or position.

Antifragile teams prepare to diversify logistical channels by understanding how to resource needs from a variety of U.S. as well as regional/local suppliers and potentially even 3-D printing.[25] DOD should evaluate the feasibility of developing an electronic library of commonly used or critical supplies that could be replicated via 3-D printing. Prior to deployment, teams should anticipate options for task execution in differently resourced scenarios and proactively seek counsel from more experienced military medics, many of whom have developed practical heuristics for managing unexpected challenges. Medical leaders must ensure their teams take full advantage of Web- and phone-based resources, such as the Joint Trauma System's multidisciplinary consultation service and clinical practice guidelines (CPGs).[26] CPGs and other critical information should be downloaded and/or printed before deployment to mitigate risk from cyber degradation. Information agility is enhanced with local surveillance, from leaders getting out and acquainted with the community on and, as appropriate, off base first-hand, as well as instituting

real-time surveys of behavioral and perceptual trends (if needed).

In this way, antifragility clearly corresponds with a hallmark of high-reliability organizations (HROs), deferring to expertise and seeking out the best data from all sources—often frontline personnel of comparatively lower rank—to inform key decisions. Another HRO principle, commitment to resiliency, clearly corresponds with the aspirations of antifragility. The other three HRO principles—preoccupation with failure, sensitivity to operations, and reluctance to simplify—are byproducts of actions required to establish and maintain trust.[27] All grease the OODA loop to help medical leaders make the best decisions as quickly as possible. Commitment to provide trusted care as an expeditionary HRO is equally important as in garrison, and the tools used for care at home installations should be adapted to the deployed environment.

Antifragile cultures keep options open and constantly innovate to test potential improvements or new safeguards for critical needs. Leaders must ensure team members respect each other and outside agencies to keep bridges open and seek to understand and effectively interface with other cultures. Effective medical commanders integrate into the leadership community at their installations in both formal and informal settings (and, when possible, local host nations) to gain trust and seek multisectoral solutions for shared challenges. They translate the "why" from the line to the medical side and vice versa.

The Importance of Energy Management

As discussed, energy is a key determinant of thrust and agility. Energy is also a critical asset for leaders, especially during combat.[28] Effective leaders invest their personal energy to transform members' passion and potential into performance and a sense of belonging and identity. Perhaps the most consistent determinant of a team's morale—and psychological energy—is a sense of a positive, meaningful group achievement. This occurs when values and resources align on a common worthwhile and reachable target.[29] Leading expeditionary medical groups demands that energy be invested in four domains before and during deployment.

Clinical: Overseeing the Prioritization and Provision of Care for Seriously Injured and Ill Individuals. If leaders are not clinicians, they must quickly develop trust and effective communication pathways with clinicians on the team. If leaders are clinicians, they may provide helpful additional perspective, but more important, they must have the humility to listen to other clinicians, defer to relevant expertise regardless of rank or position (and process that data along with potential simultaneous operational or command concerns), and establish a culture in which all medics know they are empowered and expected to do the best thing for their patients at a relevant tempo according to their training and judgment.

Expeditionary: Performing in a Differently Resourced Environment in a Different Culture.

Tactical: Optimizing Individual Performance and Team Dynamics, Especially in a High-Risk Environment. This optimization may require advanced technology or other innovative means if aspects of care are dispersed or isolated in the field.

Institutional: Maneuvering Within a Large Organization (or Meta-Organization) to Obtain Resources to Meet Enterprise Needs. This maneuvering may require nuanced intercultural and political understanding to navigate and obtain joint, interagency, and/or international support.

Optimizing Energy Through the Hybrid Performance of a Team of Teams

Aircraft engineers must often choose between competing goals, such as instantaneous versus sustained turn performance in selecting design parameters for an isolated airborne platform. Similarly, there are competing advantages and limitations in operating as small teams versus large organizations. Fortunately, deployed medical groups can gain the best in hybrid "wing-loading" performance by operating as a networked team of teams, leveraging the strengths of each. Effective leadership of a deployed medical team demands knowledge, skills, and abilities that enable maneuver and engagement within one's tactical medical unit, coupled with the resources (intelligences, materiel, personnel) of the larger fighting team, deployed forces under other commands, component commands, geographic combatant commands, military department agencies, coalition forces, and host-nation organizations to achieve one's goals. This requires proactively developing and maintaining a network of personal and professional relationships informed by an understanding of logistics and joint operating principles, along with the interpersonal skills to understand and successfully navigate competing demands within a complex bureaucracy. Such leadership enables medical teams the best chance to "out-accelerate, outturn, and out-endure" their challenges.

For example, when Al Dhafra Air Base in U.S. Central Command (USCENTCOM) encountered a COVID-19 outbreak in 2020, it was able to immediately reprioritize its medical services and change its posture due to cross-training of its deployed medical personnel weeks prior to cover common critical tasks and recently accomplished expansion of clinical care space. Both required clear communication internal to the medical group of the need for antifragility and to the installation command to achieve buy-in. Its agility was enabled by an OODA loop fed by information from its own frontline medical personnel of all ranks and backgrounds (a radiology technologist, not one of the providers, gave the first indication of the outbreak), USCENTCOM and component command staff, as well as the local embassy and partner-nation personnel in local hospitals through relationships that had been proactively developed through trauma-oriented exercises in the preceding months.

The base networked with other bases in-theater to procure diagnostic materiel. It gained trust among the personnel on base through the transparent reporting of

U.S. Soldiers in 30th Armored Brigade Combat Team perform field run and litter carry as part of Hickory Cup competition held in U.S. Central Command area of responsibility, March 1, 2020 (U.S. Army National Guard/Cindi King)

information at the speed of relevance and collaboratively identified needs with line commanders to secure needed additional resources on base originally allocated to other units. All these behaviors and relationships had been developed in the prior months to prepare for potential regional state actor aggression and were successfully translated to address a novel threat.[30] As a result, the outbreak was eliminated without adversely affecting the installation's combat readiness or sortie generation rate.

Readiness Recommendations

Selection and Development. Lord Moran, Winston Churchill's physician, wrote in *Anatomy of Courage* that "the art of selection is the secret of leadership."[31] General James Mattis emphasized the Marines' axiom, "Recruit for attitude, train for skill."[32] Future expeditionary leaders, selected in part for competence in their profession as well as an appetite to serve in deployed combat support missions, need to be provided opportunities—through early career deployment, DOD global health engagement missions, and/or volunteer overseas service—to develop skills functioning in unpredictable, differently resourced, demanding environments to help them build strength. They also require the ability to rapidly assess and motivate deployed team members whom they likely had neither any role in selecting nor the opportunity to serve with before. As Moldoveanu and Narayandas write, "Learning is less a function of adding something that isn't there than it is of recognizing, reinforcing, and refining what already is."[33]

Leaders must not only be confident in their primary career field but also have meaningful experience and study to broaden clinical, administrative, and leadership perspectives. This preparation helps leaders evaluate the competence of their team members and efficiently communicate and gain their trust and respect. Leaders also enhance trust through their degree of perceived skin in the game.[34] Selection and development pathways should provide opportunities for medics to directly support field operations early in their career to assimilate the risks of deployed service. This will enhance understanding, confidence, and the ability to effectively communicate with line warfighters. More frequent but shorter deployment cycles would support this goal, and noncombat experience such as short-term DOD global health engagement missions, use of permissive temporary duty for international humanitarian service, and exchange programs should also provide helpful perspective.

Staff nurse assigned to one of Naval Medical Center San Diego's internal medicine wards helps general duty corpsman don personal protective equipment, including 3D-printed face shield donated to hospital by Naval Information Warfare Systems Command, before entering COVID-19-positive, noncritical patient's room, August 4, 2020 (U.S. Navy/Jake Greenberg)

Training.

Personal Learning Cloud. The corporate sector is embracing the "personal learning cloud," an online portfolio of courses and events tailored to user needs.[35] This approach is proving less expensive, more personalized (pace, media, topic, modular), socialized (geared toward solving problems together, project-based, "action-learning"), contextualized (directly relevant), able to track outcomes and trends, and able to measure skill acquisition and transfer at individual and group levels.

Virtual Reality. Just as the Army, Navy, and Air Force have demonstrated cost savings as well as faster results for pilot training with virtual reality (VR), this platform offers several attractive benefits to medics. Predeployment, VR would allow disaggregated medics to train together on common scenarios to identify weaknesses and enhance group dynamics. It would also provide familiarization and desensitization to less common but potentially catastrophic and/or emotionally stressful events such as managing CBRNE casualties or expectant patients. During deployment, VR provides a means to maintain cognitive and limited psychomotor skills for high-yield scenarios as well as to maintain focus on the purpose for serving abroad during calm periods.[36]

Cross-Training. Redundancy and resiliency could be enhanced by proactively cross-training medics. Deployed medical teams often rely on a single medic for certain specialty functions. Cross-training other medics to perform the most common and/or critical tasks could offset risk of failure when certain personnel are not available, incapacitated, or overwhelmed by demand.

Civilian Partnerships. With the exception of the San Antonio Military Medical Center, which benefits from receiving both military and civilian trauma and burn victims, DOD has no Level 1 trauma centers. As prescribed in the 2017 National Defense Authorization Act (Public Law 114-328), Section 708, units need to develop long-term relationships with high-volume civilian trauma centers as training and currency platforms, even if this means transferring some beneficiary care outside military treatment facilities. The 2019 Pandemic and All-Hazards Preparedness and Advancing Innovation Act (Public Law 116-22) establishes Federal grants to offset civilian trauma center costs from integrating DOD teams into their institutions; it also supports the Centers for Disease Control and Prevention and preparedness for national medical disasters such as the current COVID-19 pandemic. However, no funds have yet been appropriated for trauma center incentivization, and senior military leaders should advocate for this to be realized. In addition to embedding within U.S. civilian centers, military

medicine gains may also be obtained by rotations in less developed nations to identify adaptive approaches to care in less resourced areas potentially similar to more austere deployed environments.[37]

DOD must continue funding medical education, training, and casualty-care research in civilian academic and Veterans Affairs hospitals. Because of staff stability and typically larger volumes of complex clinical cases, these partners provide outstanding clinical experience. They can also generate meaningful cutting-edge research when their priorities are informed and incentivized by DOD. Lessons learned from these partnerships need to be captured and integrated into evolving DOD research priorities and practices. Hiring experienced civilians to serve at military treatment facilities for mentorship and continuity of in-garrison care when Active-duty medics are deployed or training at high-volume centers also positively supports expeditionary leadership.

Formal Courses. All three Services provide trauma team members predeployment refresher training. Training is also important for commanders of expeditionary medical units who may or may not be clinicians to prepare them for leading multidisciplinary direct clinical care and support personnel while deployed, facing unique challenges such as intercultural communication and operating in a resource-constrained environment at high tempo for prolonged periods. To meet this demand, the Air Force's Expeditionary Medical Support course was recently intensified to simulate the anticipated future combat environment; commanders, especially those without prior deployed experience, should be required to participate in such courses to enhance understanding their team's needs and reinforce effective leadership behaviors. The Navy provides a catalog of predeployment medical training that has also been tailored to the roles in which deployers will serve, whether in the fleet or in support of the Marine Corps.[38] Formal precommand courses should also address concerns unique or especially relevant to the deployed Service, including leading and caring for joint and coalition troops and issues related to care of host-nation personnel, noncombatants, and enemy combatants.

Knowledge/Situational Awareness. General McChrystal observes that the speed of information and change as well as modern interdependence create unprecedented complexity. He argues the challenge is countered by adaptability, and to foster this, "an organization should empower its people, but only after it has done the heavy lifting of creating shared consciousness."[39]

To create this shared consciousness, component commands—and when possible, combatant commands—should provide expeditionary medical leaders a predeployment orientation to command operations, priorities, and relevant regional intelligence. Medical security cooperation activities (including relevant points of contact and command relationships) for the region and host nation should be discussed with global health engagement staff; these activities should also be reviewed with the Embassy country team on arrival. Predeployment just-in-time cultural and focused language orientation is valuable, but DOD should further incentivize and assist medical professionals in gaining deep regional and, if possible, linguistic familiarization over their careers. Relationships with host-nation medical institutions should be tracked by the component command at the level of the ministries of defense and health as well as leading local hospitals and public health offices and shared with the deployed medical leadership team to empower them with an understanding of the full context of the operational situation and strengthen partnerships. Both before and during deployment, medical leaders should be required to read relevant after-action reports, lessons learned, and real-time intelligence, and evolving plans for the theater and host nation to be prepared to contribute to multiple interdependent OODA loops of commands and allied forces.

Conclusion

In a world of accelerated change of opportunities and risks, DOD more than ever needs to deploy leaders able to rapidly assess, decide, and act in expeditionary environments. The thrust and agility for deployed medical teams come from trust (confidence in the intent and capability of oneself and others) and antifragility (the ability to improve with disruptions). Effective leaders need to be developed, selected, trained, networked with other committed leaders, and provided the resources to succeed.

Hippocrates wrote, "Life is short, the Art long, opportunity fleeting, experience treacherous, judgment difficult. The physician must be ready, not only to do his duty himself, but also to secure the cooperation of the patient, of the attendants and of externals."[40] To optimally care for combatants entrusted to their teams, medical leaders must be competent in the essentials of their own career fields. Even more important, however, senior leaders must be able to effectively coordinate the resources "of the attendants and of externals"—their team members as well as networked professionals in the U.S. Government, host nation, and coalition authorities.

Thucydides, a contemporary of Hippocrates, provides insights from the Peloponnesian War that remain valid for us today: "In practice we always base our preparations against an enemy on the assumption that his plans are good; indeed, it is right to rest our hopes not on a belief in his blunders, but on the soundness of our provisions. Nor ought we to believe that there is much difference between man and man, but to think that the superiority lies with him who is reared in the severest school."[41]

General Mark A. Milley outlined in his first communiqué as the 20th Chairman of the Joint Chiefs of Staff his focus areas to achieve force agility. They include improving joint warfighting readiness, developing the joint force of the future, developing and empowering joint force leaders, and taking care of our warriors.[42] For the military health system to take care of our warriors, DOD must apply the first three areas to medical leaders. We must fulfill Office of the Secretary of Defense manpower priorities and prepare our medical force by giving them, beginning as early as possible in their

careers, opportunities to gain combat support–relevant experience to acquire the attitudes, knowledge, skills, and abilities to lead and adapt our expeditionary medical platforms and successfully integrate them in a network of theater and U.S.-based resources.[43] In other words, to face tomorrow's enemies, we must deliberately develop superior leaders able to quickly yet sustainably maneuver in multidomain operations by creating trust and antifragility, optimizing the human dimension in the fight. JFQ

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