

STABILIZING THE MILITARY HEALTH SYSTEM
TO PREPARE FOR LARGE-SCALE COMBAT
OPERATIONS

HEARING

BEFORE THE

COMMITTEE ON ARMED SERVICES
UNITED STATES SENATE

ONE HUNDRED NINETEENTH CONGRESS

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STABILIZING THE MILITARY HEALTH SYSTEM TO PREPARE FOR LARGE-SCALE COMBAT OPERATIONS

Tuesday, March 11, 2025

UNITED STATES SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, DC.

The Committee met, pursuant to notice, at 9:36 a.m., in room SD-G50, Dirksen Senate Office Building, Senator Roger Wicker (Chairman of the Committee) presiding.

Committee Members present: Senators Wicker, Fischer, Cotton, Rounds, Ernst, Sullivan, Cramer, Scott, Tuberville, Mullin, Budd, Schmitt, Banks, Sheehy, Reed, Shaheen, Blumenthal, Kaine, King, Warren, Peters, Rosen, and Kelly.

OPENING STATEMENT OF SENATOR ROGER WICKER

Chairman WICKER. The hearing will come to order.

The Committee has convened this hearing to discuss the State of the Military Health System (MHS). We hope to shine a light on the challenges facing that system and begin working toward solutions.

Our witnesses are experts in the field of military medicine. Dr. Douglas Robb is a retired Air Force Lieutenant General and the former director of the Defense Health Agency (DHA). Dr. Paul Friedrichs is a retired Air Force Major General and the former Joint Staff Surgeon. And Dr. Jeremy Cannon is a retired Air Force Colonel and trauma surgeon who currently serves on the faculty at the University of Pennsylvania School of Medicine.

I look forward to their testimony. I want to hear their recommendations about what Congress and the Department of Defense should do to provide long-term stability to the Military Health System.

Military medicine often follows a familiar but regrettable cycle. During peacetime, medical teams focus on the treatment of ordinary illnesses. When conflict erupts, military medicine is frequently caught unprepared, resulting in unnecessary casualties.

This interwar erosion of our unique military medical skills is known as the “peacetime effect.” To disrupt the “peacetime effect,” Congress enacted sweeping reforms of the Military Health System. These reforms, now nearly a decade old, were designed to refocus military medicine on its primary purpose: combat casualty care and medical readiness.

We elevated the Defense Health Agency to a combat support agency and tasked it with administration of all military hospitals

and clinics, relieving the military departments of that mission. The goal was to have the military services focus exclusively on the medical readiness of their forces. These ideas were recommended by an independent, bipartisan commission embraced by Pentagon leadership, and signed into law in 2017.

Unfortunately, opponents of these reforms have delayed implementation and undermined the effectiveness of the legislation. For example, in 2019, the military departments implemented drastic cuts to military medical personnel on the faulty assumption that it would be easy for DHA to hire civilians to take their places.

This assumption was misguided, which became evident during the COVID pandemic. During that crisis, the existing national physician shortage accelerated. To this day, private sector health systems seek out and hire away doctors from the military, not the other way around. We have all seen this in our states.

In 2020, Congress ordered a halt to any additional military medical reductions, but it was too late. A significant number of reductions had already occurred, severely reducing the capability of military hospitals. In many locations, the private sector was unable to handle the additional patients, sending more servicemembers to private sector care. This has proven more expensive and has sapped the military doctors' experiences that are vital to maintaining proficiency.

Even worse, the Department of Defense (DOD) has refused to request adequate funding for DHA, which would allow DHA to staff adequately and equip its hospitals and clinics. Since 2015, the budget for military hospitals has decreased by nearly 12 percent. The water damage at Walter Reed this January is an example of the antiquated infrastructure that military medical teams work with around the world.

In addition to the problems I have just explained, I would like our witnesses to highlight how bureaucratic delays within the Department of Defense have prevented the Military Health System from preparing for the next potential conflict.

Combat casualty care is the primary purpose of the Military Health System. When servicemembers are exposed to danger or are injured, they need to know that they will receive the best care possible. We know that troops in combat are more comfortable taking the risks necessary to accomplish their mission if they have confidence in military doctors.

We cannot go back to the way things were before 2017. We must stop scapegoating the Defense Health Agency. The Department of Defense must request adequate resources to ensure the Department's hospitals and clinics are properly staffed and equipped. This is the best way to ensure the Military Health System is ready for the potential demands of large-scale combat operations in the future.

I thank the witnesses for being willing to testify and now recognize Ranking Member Reed for his remarks.

STATEMENT OF SENATOR JACK REED

Senator REED. Thank you very much, Chairman Wicker, and welcome to our witnesses. General Douglas Robb, General Paul Friedrichs, and Colonel Jeremy Cannon each bring important per-

spectives from their extensive careers in military medical fields. We are fortunate to have such a distinguished panel before us.

Throughout history, military medicine has often represented the leading edge of modern health care. Many of the lifesaving practices common in today's emergency rooms and clinics were born out of necessity on the battlefield hospitals of the Civil War, World Wars I and II, Vietnam, and the wars in Afghanistan and Iraq.

Professional expert health care, both in combat and peacetime, is a vital component of our military. Our service men and women, and their families, deserve nothing but the best in this regard.

I am concerned that our military health care system will be challenged to meet the demands of a potential large-scale future conflict, particularly in the Indo-Pacific. We have seen the terrible challenges of health care in austere environments, like the front lines of Ukraine, where supplies and medics are often cutoff from the troops in contact. These risks would be compounded in the Indo-Pacific where contested logistics and the tyranny of distance would be major factors.

Congress has dedicated considerable attention to reforming the Military Health System in recent years, with an eye toward any potential future large-scale conflict. The primary objective of these reforms has been to improve combat casualty care, assume quality medical care for servicemembers and their families, and ensure that military medical professionals are able to deliver the world's best care on the battlefield, at field hospitals, and at medical centers and clinics.

However, until relatively recently, the Military Health System was inadequately designed to meet these missions. For decades, the individual military branches managed their own Military Treatment Facilities (MTFs) and the Defense Health Agency, or DHA, was tasked with managing Defense Department health care via civilian providers. This system was hampered by unnecessary complexity, a lack of standardization, inefficiency and redundancy in the system, and inflated costs. The Military Health System was too focused on beneficiary care while insufficient attention was paid to combat casualty care.

To address this, the fiscal year 2017 National Defense Authorization Act (NDAA) included provisions restructuring much of the system. This legislation transferred responsibility for operating the Military Treatment Facilities entirely to DHA. This change was intended to allow the military services and surgeons general to focus on medical readiness for the force and its health care providers.

Unfortunately, implementation of this legislation has been difficult. The military services have not implemented the changes readily, and they have failed to staff the treatment facilities with the military personnel needed to provide timely care. The Department of Defense made progress to break through the inertia in 2023, when it issued a memorandum with specific direction to save lives and improve the Military Health System, to include adequate manning of Military Treatment Facilities, and this effort marked a major milestone in modernizing the system.

More work remains to be done, and I hope that the Trump administration will continue the momentum in this area. During today's hearing, I would ask for our witnesses' views on the key chal-

lenges remaining for successfully reforming the Military Health System and how Congress can help equip the Department and our warfighters with the medical support needed for any future conflicts.

Thank you again to our witnesses, and I look forward to your testimonies. Thank you, Mr. Chairman.

Chairman WICKER. All right. We will begin with 5-minute testimonies from each of our distinguished witnesses.

Lieutenant General Robb, you are recognized.

STATEMENT OF LIEUTENANT GENERAL (DR.) DOUGLAS J. ROBB, USAF (RET.), FORMER DIRECTOR OF THE DEFENSE HEALTH AGENCY

Dr. ROBB. Chairman Wicker, Ranking Member Reed, and distinguished members of the Committee, thank you for this opportunity to testify on the urgent need to restore and sustain our military medical readiness in the face of large-scale combat operations, and thank you both for what I would believe is spot-on comments. So thank you very much.

Just a little background on where my perspective of the Military Health System originates from, I started my military career as a boots-on-the-tarmac operational flight doc, both stateside and overseas. I have served at the Air Force Squadron hospital, clinic, and medical centers in commander positions, and at the headquarters level.

I have also had the honor and privilege to serve our joint forces as the U.S. Central Command surgeon, joint staff surgeon, and as the first Director of the Defense Health Agency.

Moving forward, a refocus on our ability to support large-scale combat operations, I believe, will require a recalibration of current and future resources to support large-scale casualty flow, from the battlefield or the sea battle to definitive care, rehabilitation, and eventually reintegration. All this in the face of incremental pressures from The Office of the Secretary of Defense (OSD), The Office of Management and Budget (OMB), and the military departments, resulting in a decade-plus of flatline actually declining defense health program budgets, personnel reductions, erosion of our mission-critical Military Treatment Facilities, and intense competition for quality health care professionals with the private sector.

One of the key Military Health System organizational elements in support of the Military Health System strategy is the evolving and maturing Defense Health Agency, designated as a Combat Support Agency (CSA). It was established over a decade ago. Recently, the DHA's justification, and specifically the DHA's designation as a Combat Support Agency, has been challenged and questioned.

In 2011, the Deputy Secretary of Defense issued a memo titled "Review of Governance of Model Options for the Military Health System." That was driven by the Department's significant growth in health care costs. Fast forward a decade later—sound familiar?

The Task Force on Military Health System Governance Reform was then established—and this is key—that included co-chairs from the Joint Staff, OSD, and flag and senior executive service (SES) representation from the Joint Staff, OSD Personnel and

Readiness, Cost Assess and Program Evaluation (CAPE) and Comptroller, and the service surgeons general, for a total of nine voting members. And I think it is also important to recall the task force overwhelmingly recommended a Defense Health Agency organizational model, with a final vote of seven for the Defense Health Agency, one for a unified medical command, and one for what then was called a single-service model.

The recommendations were briefed through both Joint Staff and actually through two Chairmen, and Office of Secretary of Defense and actually through two Deputy Secretaries of Defense, with the Defense Health Agency construct signed off by the Deputy Secretary of Defense with the Chairman's support.

Another decision that has come into question in recent years was the designation of the Defense Health Agency as a Combat Support Agency. The designation was initiated by the Director of the Joint Staff, with the Chairman's concurrence, when reviewing the proposed DHA organizational structure and the relationships with both the Chairman and the OSD. The CSA designation was then codified.

Now, a decade later, do I still believe the original analysis and the recommendation to stand up a Defense Health Agency as a Combat Support Agency remain valid? And the short answer is yes. But does a recalibration of the Defense Health Agency supporting relationship with its Combat Support Agency responsibilities to the supported entities of the military departments and the Joint Forces need to be readdressed? And again I would say yes.

I share with you several lines of effort that I believe are essential as we strive to further achieve a more tightly integrated Military Health System to support our national military strategy and our national security strategy.

Number one, reemphasizing, with clear articulation and execution, of the Assistant Secretary of Defense of Health Affairs' authority, direction and control of the Defense Health Agency.

Number two, I believe we need to establish a direct organizational linkage at the Defense Health organizational structure level, with the Chairman of the Joint Chiefs of Staff and the combatant commands through the Joint Staff Surgeon, to ensure that the responsibilities are prioritized with the DHA's execution.

Finally, the Fiscal Year 2019 NDAA directed the Department to establish joint force medical requirements process to synchronize the Military Health System's already established joint operational requirements governance process. And I think that is key, that the medics need to play with the Joint Staff's process for determining requirements.

In closing, I would like to thank you, and look forward to support you in assisting the Military Health System's ability to accomplish our mission of ensuring a medically ready and a ready medical force in support of our military departments and combatant commands through the provision of care to our 9.5 million beneficiaries. Thank you.

Chairman WICKER. Thank you very much, Dr. Robb.
Major General Friedrichs.

**STATEMENT OF MAJOR GENERAL (DR.) PAUL A. FRIEDRICHS,
USAF (RET.), FORMER JOINT STAFF SURGEON**

Dr. FRIEDRICHS. Chairman Wicker, Ranking Member Reed, and members of the Committee, thank you so much for the opportunity to be here. I had the opportunity in my very last briefing to some members of this Committee in May 2023 to give you a classified assessment of MHS readiness, and I will start with a recommendation that if you have not had an update since May 2023, I would implore you to schedule that so that the Joint Staff Surgeon can give you the most current classified assessment, because what we will provide today is an unclassified assessment.

Second, I will give a disclaimer that the views that I express are my own, not those of any organization with which I have been affiliated.

I provided a detailed written statement to you, and I would respectfully ask that that be entered into the record of this hearing.

Chairman WICKER. All of the statements will be added to the record at this point, without objection.

Dr. FRIEDRICHS. Thank you very much, Chairman.

I have two disclaimers. The first, this is my family business, so I will speak both from my experience and because my dad served in the Navy—98, still alive—at the end of World War II. Multiple other relatives in the Navy. My wife is a former Army physician who now works for the Department of Veterans Affairs (VA). We are very proud that one of our children is a marine. I care about this not only because of all of the others but because this is what my family has done for generations.

My second disclaimer, like General Robb, is I have had the privilege of serving our country now for 39 years, and the majority of those years I have spent in joint roles. Congress got it right in 1986, with the Goldwater-Nichols Act, but the one thing I wish you would change is to include medics as part of the military. As long as we preserve this false narrative that the Military Health System is separate and not covered by the same expectation of jointness as the rest of the military, we are going to continue to have these fruitless, bureaucratic buffoonery actions that distract us from taking care of patients. I encourage you to treat the Military Health System like a part of the military.

We have had tremendous accomplishments over the last 20 years, with the lowest rate of deaths among injured ever seen in conflict, and we should be incredibly proud of that. When I deployed, I had what I needed, when I needed it, air-evacuation available. I flew air-evacuation missions. I operated on casualties. I never lacked for what I needed. I cannot offer you the assurance that my successors will have that same environment in the next conflict, and I am grateful that you are holding this hearing today.

I have several very specific recommendations. First, as I touched on before, we must prioritize the patient over the patch, put a nail in the heart of this discussion about reorganizations and what the role of the Military Health System actually is. We need to commit, and we need your help in the next NDAA, to clearly articulate, just as both the Chairman and the Ranking Member said, the Military Health System exists as part of the military to ensure that we deter those who might seek to harm our Nation and defeat them

if they try to. The military's role is to take care of the human weapon system. The health care benefit delivery is part of how we do that, and part of a commitment that we make. But I implore you to address that in the next NDAA.

As I said before, I think that you got it right with the Goldwater-Nichols Act, and I would encourage you in the next NDAA to clearly articulate that you view the Military Health System as part of the military and not exempt from the requirements that the rest of the military faces. A joint casualty stream requires a joint casualty care team. That seems relatively straightforward, and yet that is still something that we are arguing over, whether medical units should be interoperable, whether they should have the same equipment or the same training. The answer is yes.

Look at Israel. Look at almost every other country with a large military. They have already made those changes, which you rightfully began and appropriately began in 2017. We do not need another reorganization. What we need is execution of the vision that you laid out.

The next point that I bring up is resourcing, and both the Chairman, the Ranking Member, and Dr. Robb touched on this. Health care is not cheap. The mistaken belief that somehow military medicine can be done at a lower cost than in the civilian sector, and be ready for conflict, is just that. It is a mistake and it is a discredit to those who State that they care about our patients.

Finally, I am deeply concerned about our growing vulnerability to biological threats. The decisions to take down our overseas partnerships to build better biosurveillance, the decisions to take down research in biological threats, the decisions to take down multiple other programs that we had built as a result of the 2018 National Defense Strategy, which President Trump signed in the first administration and President Biden updated, put us at greater risk. And we must continue to address those risks of the evolving biological threats, both naturally occurring and deliberate threats. The confluence of Artificial Intelligence (AI), biotechnology, and compute is dropping the bar dramatically for biological threats. We should be working on mitigating that.

I thank you again for the opportunity to be here and for your interest in this.

[The prepared statement of Dr. Friedrichs follows:]

PREPARED STATEMENT BY THE HONORABLE PAUL FRIEDRICHS, MAJ GEN (RET)., MD,
FACS

Chairman Wicker, Ranking Member Reed and distinguished Members of the Committee, thank you for the opportunity to testify on this topic. My last congressional engagement as the Joint Staff Surgeon in 2023 was with several of you to provide a detailed, classified update on the gaps between Combatant Command requirements for medical support and the readiness of the force elements which the Services organize, train and equip, with support from the Defense Health Agency (DHA), in its role as a Combat Support Agency. It is an honor to be back to share some additional observations on this very timely topic on which Congress needs to act, in order to address critical gaps in our readiness to care for ill and injured Servicemembers.

The opinions and advice I share in this statement and in my testimony are my own; I am not speaking on behalf of any organization with which I am or have been affiliated.

I need to acknowledge several conflicts of interest related to this hearing:

First, and foremost, this is my family's business...and I care deeply about it. I am the proud son of Seaman Third Class Al Friedrichs, who turned 98 this past January and who served in our Navy at the end of WWII. Multiple other relatives served in the Navy. One of the few really great decisions I have made in my life was to propose to my wife more than thirty years ago, when she was serving as a doctor in the Army. Our kids thought it was incredibly cool that their mom really did wear combat boots. After separating from the Army so that our family could stay together, she has worked for the Veterans Health Administration for decades, continuing her commitment to care for those who volunteer to serve their nation. And one of our children is now a marine.

Second, I am deeply grateful to have had the opportunity to serve our Nation in uniform for 37 years, including three tours as a Commander, as well as service as the Command Surgeon for Alaskan Command, Pacific Air Forces, Air Combat Command and United States Transportation Command, where I oversaw the global aeromedical evacuation system. My last assignment was for 4 years as the Joint Staff Surgeon, attempting to integrate and synchronize medical support to military operations and family members on every continent and in multiple conflicts and disasters. These experiences have taught me that the rest of the military deploys and fights as a Joint Force, not as individual Service forces. I believe to my core that the military health system is a part of the US military and should adopt the same commitment to joint, integrated capabilities and readiness that the rest of the military has embraced, and I commend Congress for the actions they have taken to try to break down stovepipes and enable greater standardization, interoperability, and integration.

Nearly 250 years ago, our Nation was born out of the American Revolution. Historians estimate that between 25,000 and 75,000 members of the Continental Army died during this conflict, with three deaths from illness for every one death from injury. Roughly 1,400 medical personnel served in the Continental Army, but only 10 percent had any formal medical training. Since then, we have been on a journey to continue improving the care we provide to America's sons and daughters who serve their nation in uniform and this has resulted in a steady and continuous decline in the percent of injured servicemembers who died of their wounds. Numerous innovations in both pre-deployment care and the care we provide to deployed personnel have enabled military medics to successfully treat and return to duty more and more ill servicemembers, enhancing combat capabilities. And for those who sustained injuries in Operational Iraqi Freedom/Operation Enduring Freedom, fewer died than in any conflict in history. This is an extraordinary testimony to the work of countless military doctors, nurses, pharmacists, Corpsmen and other military medics. And it was shaped by congressional direction in the annual National Defense Authorization Acts (NDAA) and annual appropriations which translated that guidance into reality. Thank you for all that you and your predecessors have done to enable these remarkable results.

As proud as we should be of these unparalleled accomplishments, every organization committed to excellence knows the importance of asking "What could we have done better?" High performing healthcare systems know that "Good enough" is not acceptable, especially when it comes to the health of America's sons and daughters who choose to defend our Nation. Some of our military medical colleagues reviewed the available data on every single servicemember who died in recent conflicts and what they found is remarkable: even with nearly total air superiority, unfettered communications, aeromedical evacuation on demand, and largely unhindered supply chains, roughly 25 percent of those who died prior to 2012 had injuries which should have been survivable. This is an incredibly important—and painful—lesson: We could have done even better.

Unfortunately, we have made insufficient progress toward minimizing preventable battlefield injuries and death. In some cases, we have mistakenly confused loyalty to the patch on our uniforms over our commitment to our patients. We have confused efficiency with effectiveness. We have argued for years about roles and responsibilities and competing interpretations of congressional intent. Thankfully, because the United States is not involved in large scale combat operations at this time, we have the opportunity, with help from the members of this Committee, to refocus efforts to ensure that, in the next conflict, military members will be medically ready before they deploy and military medics will be well-prepared to care for those servicemembers who become ill, or who are injured.

The first priority of the military health system must always be our commitment to provide the right care at the right place for every American who volunteers to serve. We must continue to demonstrate to Servicemembers and their families that the military health system will be ready to provide the care they need before they deploy, while in combat, and when they return, and that we will care for their fami-

lies and for those who have retired from the military. To do so, structural, fiscal and policy changes are needed. After studying this for most of my career, I urge the members of this Committee to reject any recommendations to revert to stovepipes and siloes of care. There is no data to support the premise that any one Service delivered better care in garrison or down range and ample evidence from multiple conflicts that the best outcomes for patients occur when medics work together (like the rest of the military does when it deploys). I am dismayed that some colleagues continue to assert that some Members of Congress appear to question the merits of integrating medical capabilities as directed in 2017; this perception has complicated efforts to focus as a Joint medical team on improving care to Servicemembers who rely on military medics to be ready when needed. I strongly oppose any recommendations for another large-scale reorganization of the military health system; these take years to implement and will continue to distract my colleagues from the important job of improving care by requiring them to instead focus on building new bureaucracies. I believe the DOD has the capabilities it needs, although, as I will address below, not the resources, to truly achieve the vision of great care, anywhere for our those who go in harm's way in defense of our Nation. Attachment One, National Defense Authorization Act Recommendations, summarizes recommended language for the Committee's consideration. (NOTE: For any recommendations which fall outside the purview of this Committee, I respectfully request that Committee staff share the recommendations with the appropriate Committee, and, if possible, convey the intent of this Committee related to the recommendation.)

1. *Roles and Responsibilities:* In 39 years of government service, and especially in military health system "governance" meetings, I have been dismayed at the amount of time and energy dedicated to this topic at the expense of discussing how to improve the effectiveness and efficiency of care. I remain deeply grateful for and supportive of the changes directed in the 2017 National Defense Authorization Act (NDAA). Congress wisely recognized that Servicemembers' anatomy and physiology do not vary based on the patch they wear and that we can deliver better care if we work as an integrated system, rather a system of competing systems. Other than a few niche environments (e.g., care in low gravity environments, undersea medicine, etc.), the Senate should direct standardization of equipment and training for deployable medical force elements, as recommended by the Joint Trauma System (JTS) and also that medical force elements must be interoperable (i.e., a Role 2 medical force element from one Service can combine with a Role III 3 medical force element from another Service, when directed by the Combatant Commander in order to provide the right combination of capabilities to care for ill and injured servicemembers). Almost every other modern military has already done so, and, as our Israeli and German and other colleagues have repeatedly shown, military medics deliver more effective care more efficiently if we standardize and integrate capabilities. The only structural changes I recommend are:
 - a. Dual-hat the Joint Staff Surgeon as the Defense Health Agency Deputy Director for Combat Support and align key operational support capabilities under this two-star leader, as described below and in Attachment 1.
 - b. Require the Combatant Commands to implement the Combatant Command Trauma System staffing requirements to ensure readiness to collect, analyze and share data on ill and injured in their Area of Operations in order to continue to improve the care our Nation's defenders receive.
 - c. Require the Defense Health Agency (DHA) to reinstate Defense Health Agency Procedural Instruction 6040.06, Combatant Command Trauma Systems.
2. *Evolving Threats:* Care for ill and injured is challenging and there are clearly opportunities to improve that care. And the range of threats to which military medics must be prepared to respond is growing.
 - a. Disease, Non-Battle Injury (DNBI): Military service is a challenging calling, and many medical conditions impact the ability of an individual to perform his or her duties. The military asks those seeking to enlist or to become officers to voluntarily identify pre-existing medical conditions and, based on that information, determines whether the member is likely to be medically qualified to perform their assigned duties. The introduction of electronic health records has made it easier to validate the information provided by those seeking to serve in the military and, in some cases, has identified medical conditions which the applicant did not voluntarily report. Some have claimed that this additional visibility into pre-existing medical conditions is contributing to lower enlistment rates, although there has been limited data to support this assertion. These pre-existing, chronic medical con-

ditions may degrade the member's readiness and frequently increase the military health system costs once the member is on active duty. Clarifying the impact of identifying pre-existing medical conditions on both recruiting and on military health system costs can help inform decisions about whether to continue to seek this information. Furthermore, roughly 80 percent of deployed service members who require medical care have medical conditions unrelated to traumatic injuries. The most common medical conditions which cause a servicemember to no longer be "medically ready" include dental, musculoskeletal and mental health conditions. Across the Services, more than 7 percent of the force is not medically ready prior to deployment, immediately decreasing the effectiveness of combat units. To preserve the fighting force, military medics must be able to rapidly diagnose these conditions and safely and effectively treat them as close to the front lines as possible. This committee should:

- i. Require an annual report on actions taken to reduce the number of uniformed personnel who are not medically ready to no more than 5 percent of the force and the actions taken to improve the ability to care for deployed Servicemembers with DNBI as close to their deployed location as possible in order to sustain the operational capabilities of their unit.
- ii. Require the Services to provide an annual report to Congress on the number and type of medical waivers granted to those enlisting in the military (e.g., accession waivers), the number of personnel who receive accession waivers and are later determined to be medically unfit for duty, including the number and type of accession waivers granted as a result of the use of the Military Health System Genesis application (i.e., the military's electronic health record) and any data on the impact of the use of GENESIS on accession rates.
- b. Antimicrobial Resistance (AMR): One of the risks for servicemembers with traumatic injuries is developing wound infections, especially in austere environments. Bacteria or fungi which are resistant to multiple antibiotics are growing domestically and globally and this has become an increasing challenge for military casualties in Europe, Asia and Africa. This Committee should require an annual report on steps taken by the Military health system to detect and to mitigate AMR in military personnel and should review the proposed Pasteur Act language to enhance support to develop new antimicrobials to protect our Servicemembers.
- c. Emerging Weapons: Mankind has continued to seek new military capabilities which will afford an asymmetric advantage over competitors and potential adversaries. Recently developed new technologies like hypersonic missiles and directed energy weapons do not appear to create revolutionary changes in risk, but, overtime, may cause new patterns of injury which military medical personnel must be prepared to treat. Waiting until new patterns of injury are seen to begin planning for appropriate care should be unacceptable. This Committee should:
 - i. Direct the Intelligence Community to prepare an annual report on new and updated weapons which create risk to servicemembers;
 - ii. Direct DOD to ensure that the Joint Staff Surgeon and select members of the Joint Trauma System and Service Surgeons' staffs have sufficient clearances to receive these updates;
 - iii. Direct the Joint Staff Surgeon, in coordination with the Services, the Joint Trauma Analysis and Prevention of Injury in Combat program and the JTS, to provide Congress with a classified annual assessment of changes needed to training and other military medical capabilities to ensure military medical personnel are ready to care for casualties from these new or upgraded weapons systems, including actions taken by the Services to address findings from prior years' assessments
- d. Burden Shifting: In 2020, the National Academies of Science, Engineering and Medicine published an analysis which highlighted the lack of resilience and surge capacity in the US healthcare system. The recent pandemic unfortunately validated that lack of resilience and, as part of the mitigation efforts to protect the American public, as many as 70,000 military medics deployed to augment the US healthcare system through Defense Support to Civil Authorities (DSCA) taskings. The National Disaster Medical System, which was designed to integrate DOD, VA and civilian healthcare systems in case of a surge in military or civilian patients has been allowed to atrophy. The Regional Emerging Special Pathogen Treatment Centers, which

are funded to care for patients exposed to, or infected with highly contagious infectious diseases (e.g., Ebola), have very limited bed capacity; and the ability to move these patients depended on capabilities in other agencies which apparently have been eliminated. In addition, only the DOD had the contracting authorities needed to enable Operation Warp Speed to achieve so much so quickly. And recent actions that reduce capabilities in other Federal Departments, including the ability to respond to disasters at home and abroad are typically mitigated by shifting those responsibilities to the Department of Defense. Because of this, the Military Health System is likely to see more taskings in the future to compensate for these reduced capabilities in other parts of the Federal Government. I recommend this Committee should:

- i. Require an annual assessment by the Departments of Defense, Health and Human Services and the Veterans Health Administration of the resilience of the US healthcare system and the readiness of the National Disaster Medical System to support DOD operational requirements during Large Scale Combat Operations, including the readiness to transport, receive and care for military personnel, US government employees and US civilians who are exposed to or infected with highly contagious infectious diseases.
 - ii. Require ASD(HA) to provide an annual summary of all healthcare support provided to other Departments and Agencies which was not funded in the DOD budget, as well as any reimbursements received for that support.
 - iii. Authorize ASPR to execute the same contracting authorities that DOD utilized during Operation Warp Speed.
 - iv. Sustain ASPR and CDC programs which help State and local health authorities continue to improve the readiness of their jurisdictions and make that support contingent on a commitment to participate in NDMS and, for those hospitals with the appropriate capabilities, RESPECT.
- e. Biological weapons and other threats: The confluence of artificial intelligence, increasing computational capacity and rapidly evolving biotechnological advances offers incredible potential for new treatments. And there will always be people who will seek to misuse these new technologies for nefarious purposes; these rapid advances significantly lower the bar for State and non-State actors to use good technologies in ways that increase the risk to the American public and to military members in future conflicts. The best deterrent to ensure these weapons are never used is to demonstrate that we will rapidly detect their use, attribute it appropriately, and hold those responsible accountable, while demonstrating the ability of our health system to rapidly mitigate the impact of acute biological threats. The foundational research creating these advances was largely based on research funded by the Federal Government through the National Science Foundation, National Institutes of Health, and the Department of Defense. It is critical that the military health system, in collaboration with the Departments of Health and Human Services, Energy, Homeland Security and the Veterans Health Administration continue to invest in research to rapidly develop better tests, treatments and vaccines for new and emerging biological threats, as well as in enhanced domestic and global biosurveillance capabilities. As noted above, the Centers for Disease Control and Prevention and the Administration for Preparedness and Response should continue to help fund State and local preparedness efforts to increase resilience to future biological threats. The Department of State should reinstate funding for programs which enhance biopreparedness capabilities in other countries to improve our ability to detect if a bioweapon or other biological threat is occurring outside the US and to assist in mitigating the impact of those threats. The 2018 National Biodefense Strategy, which was updated in 2022, and the 2023 Biodefense Posture Review outline multiple actions needed to enhance our ability to deter nations and non-nation states from pursuing or considering employing bioweapons. The Bipartisan Commission on Biodefense in 2024 released its updated National Blueprint for Biodefense. The 2020 NDAA also wisely tasked the Defense Science Board to “carry out a study on the emerging biotechnologies pertinent to national security,” and that report should be released this year. Similarly, the report from the National Security Commission on Emerging Biotechnologies (NSCEB) is scheduled for release next month and both these new reports will provide valuable advice to DOD and to Congress to inform how we best

leverage these technologies to enhance our national, economic and health security. Unfortunately, it appears that at least some of the progress made during the past 8 years is being undone by sweeping reductions in resourcing for scientific research, surveillance, medical countermeasures and Federal, State and local all hazards response programs. This Committee should:

- i. Direct DOD to provide Congress with a classified and unclassified update on implementation of the 2023 Biodefense Posture Review (BPR) within 6 months, including any remaining gaps in capabilities and mitigation plans to address those gaps.
 - ii. Direct DOD to publish an update BPR which addresses all recommendations relevant to DOD from the 2024 National Blueprint for Biodefense and the 2025 NSCEB and DSB reports by the end of Fiscal Year 2025.
 - iii. Direct the DOD to ensure that all DOD hospitals and operational labs, including those located overseas, provide the Centers for Disease Control and Prevention the same data that is submitted by other public health jurisdictions to enhance global and domestic biosurveillance.
3. *Manpower Constraints:* Enhancing the readiness of the military health system to care for ill and injured servicemembers relies, in part, on having the right number and type of military medics. The Health Resources and Services Administration (HRSA), in November, 2024, updated the Health Workforce Projections for multiple career fields. For nursing, they estimate that the current shortages in nursing cannot be significantly mitigated until 2037, at the earliest and noted a “significant geographic maldistribution” of nurses. This appears to be largely in rural areas where many military bases are located. For physicians, the projections are even more dire, with 31 out of 35 physician specialties projected to have insufficient supply by 2037 and an aggregate shortfall of 187,130 physicians across the US. Efficiency advocates have asserted that the military health system can eliminate military medical positions and either hire civilian replacements or shift the care to the private sector. In reality, the military health system is able to sustain the current level of care because it trains many of its medical personnel internally. Given the congressionally directed restrictions on increasing civilian physician training programs, closing military training programs will exacerbate both military and civilian medical workforces shortages and further degrade readiness due to even greater shortages of uniformed medical personnel. Efficiency advocates have also attempted to eliminate or substantially reduce military medical billets for specialty codes which are not required in Operational or Contingency plans; this seemingly logical action ignores the reality that mission critical training programs for critical care nurses, trauma surgeons and other specialties needed in wartime cannot maintain their accreditation to continue training unless they are in a hospital with pediatric, obstetrical and other “non-mission critical” departments. And all these workforce challenges are reportedly being exacerbated by decreasing retention of key medical officer and enlisted specialists due a perception that they cannot sustain their medical skills in the current system due to the low volume of ill or injured patients in most military hospitals. I recommend that this committee should:
- a. Ensure that any proposed reductions in military medical training pipelines are only implemented if Congress authorizes and appropriates funding for additional civilian training capacity to support military requirements.
 - b. Require the Services to provide updates to ASD(HA) and the Joint Staff Surgeon on recruiting and retention of officer and enlisted medical personnel by specialty code or equivalent designator and an analysis of reasons for separation by specialty code.
 - c. Direct the ASD(HA) and the Veterans Administration Undersecretary for Health to provide an assessment within 1 year of opportunities to increase physician, nurse and other medical training pipelines by integrating and expanding training programs.
 - d. Direct the ASD(HA) to develop a plan and cost estimate to increase the number of officer and enlisted students trained at the Uniformed Services University to address shortfalls in current training pipelines and to assist the Services in improving recruiting and retention of military medical personnel required to meet operational requirements.
 - e. Require the Services to account for authorizations required for military medical training as operational requirements, including those for specialties

which are required to maintain accreditation of training programs for surgical, critical care, and other operational capabilities.

4. *Logistical Constraints:* The military health system (MHS) prepares and sustains the warfighter, while the defense logistics enterprise (DLE) prepares and sustains the equipment and supplies used by the warfighter. The two are inextricably linked. Almost all resupply of medical units depends on non-medical logistical capabilities and capacity. Almost all deploying medical personnel travel on non-medical commercial or military logistical platforms. And almost all movement of ill and injured servicemembers who cannot return to the fight is conducted on non-medical logistical platforms. The Joint Staff Logistics Director (J4) routinely performs a “Logistic Feasibility Assessment” of Operational and Contingency Plans to determine if the proposed military operation can be logistically supported. No similar analysis has routinely been performed for medical support. In addition, as part of previous efficiency efforts, the military health system converted from a system which planned for combat to one which prioritized the efficiencies garnered from “just in time resupply.” The United States has the highest number of medications in short supply ever recorded; an analysis in 2024 by the Office of Pandemic Preparedness and Response Policy found that these shortages were not consistently found in other key partners (e.g., European countries, Japan, Korea or India), suggesting that policy actions similar to those taken by other countries could mitigate some of these shortfalls. In addition to shortages of finished pharmaceuticals, assessments by the Joint Staff have found that deployable assemblages which are expected to be resupplied during large scale combat operations contain medications and/or equipment from potential adversaries, or from a sole source which may not continue provide these items during a conflict. And recent analyses of generic pharmaceuticals have demonstrated variability in the efficacy of some medications. I recommend that this Committee should:
 - a. Direct the CJCS to include a Medical Feasibility Assessment whenever a Logistics Feasibility Assessment is conducted or updated and ensure the two are deconflicted as part of regular updates to Operational and Contingency Plans and ensure the ASD(HA) and Services review the results to identify gaps which can be mitigated through changes to policy or Defense Health Program or Service Operations and Maintenance funding.
 - b. Require the CJCS to provide an annual report on DOD operational medical supply chain vulnerabilities and actions taken or needed to reduce these vulnerabilities.
 - c. Direct the DOD to provide a report to Congress within 1 year on options to mitigate gaps in patient movement capabilities and capacity in the Continental United States during execution of the Integrated Continental United States Medical Operations Plan, including leveraging Civilian Reserve Air Fleet assets to execute this mission.
 - d. Codify that all future United States Transportation Command Mobility Capability Requirements Studies include medical transportation requirements for personnel, equipment and patient movement, as validated by the Joint Staff Surgeon.
5. *Partnerships:* In the operating room, I was part of a team which included nurses and anesthesiologists and other key contributors who cared for the patient who trusted us to cure his or her cancer, or to repair the damage from a traumatic injury. As a flight surgeon on aeromedical evacuation missions, I was part of a team which included medics and pilots and other key personnel who worked together to safely move an ill or injured Servicemember to the care they needed. As a medical leader in our Joint Force, I was part of teams which met Combatant Command requirements by leveraging the best of each Service, and by partnering with key industry and academic and international stakeholders to ensure the next ill or injured servicemember was cared for by a military medic who had the appropriate training and equipment and supplies to provide the right care at the right place and time. The American College of Surgeons has been an especially valuable partner for many years, helping to improve care in both the military and civilian healthcare systems by sharing information and research through the Military Health System Strategic Partnership with the American College of Surgeons (MHSSPACS), enabled by the Mission Zero Act. The University of Nebraska and the University of Colorado are two examples of the strong academic partners which have helped military medicine continue to innovate and improve how we train, equip and sustain the skills of military medics. In addition, because so many military bases are

located in rural areas, DOD relies heavily on community partners to provide care for Servicemembers and other DOD beneficiaries. Finally, our plans to provide necessary medical care in future conflicts and contingencies are currently built on the assumption that we will be joined by allies and partners, as we have been in every major conflict for more than a century. I recommend this Committee:

- a. Require the DOD to include medical industrial base partners identified by the Services and DHA in future Defense Industrial Base planning efforts and Joint and Service exercises involving other industry partners.
 - b. Require ASD(HA) to provide an annual report on access to care in rural communities impacted by changes in funding for Medicaid, Medicare or other Federal health programs.
 - c. Direct the DOD to provide a classified report to Congress on any assumptions regarding access to or reliance on allies and partner nations for medical care for US military personnel during future large scale combat operations and the impact on patient care if the United States changes its relationship with these nations.
 - d. Reauthorize funding for the Mission Zero Act for military civilian partnerships.
6. *Research and Innovation:* The United States has led the world in investments in research which have enabled the United States to be the leader in multiple industries which support military medical care. Academic research centers which have long provided some of the most innovative breakthroughs in medicine are facing significant challenges due to the announced implementation of a standardized 15 percent Indirect Cost Rate for research funded by the National Institutes of Health, regardless of the complexity of the research performed, as well as the planned 60 percent reduction in funding for the National Science Foundation, and reductions in research funding from the Veterans Administration and the United States Department of Agriculture and the Department of Defense, compounded by the proposed tenfold increase in taxes on university endowments which might have helped mitigate the impact of some of these changes. Within the military health system, research funding has been divided between the congressionally Directed Research Program (CDRP), which funds research on topics identified by Members of Congress, and the remaining research budget, which should address gaps in knowledge and capabilities impacting care for ill and injured Servicemembers. I recommend that this Committee:
- a. Require the DOD to provide a report to Congress within 60 days of the impact of actual and proposed reductions in Federal research funding on national security and on the ability to continue to pursue innovations and treatments for ill and injured Servicemembers.
 - b. Direct CJCS to prepare an annual prioritized list of military medical knowledge gaps requiring research, based on Combatant Command and Service inputs, which will be provided to the ASD(HA) to inform research funded by the Defense Health Program.
 - c. Require the Director of the Defense Health Agency to provide an annual report to Congress showing how research oversight by the DHA addresses the operational gaps identified by CJCS, as well as a summary of any patents awarded and peer-reviewed publications in the past year as a result of military health system-funded research.
 - d. Share the CJCS-identified priority gaps in knowledge impacting care for ill and injured Servicemembers with Members of Congress to help inform decisions about new CDRP projects.
7. *Fiscal Realities:* The United States Federal budget dramatically exceeds revenues and is unsustainable. The United States healthcare system is the most expensive system in the world on a per capita basis and delivers some of the worst outcomes of any high income country. With the current workforce, the annual US healthcare inflation rate has averaged 5.11 percent. The Military Health System is a subset of the US healthcare system; 70 percent of care for DOD beneficiaries is now purchased in the private sector, but the MHS has seen effectively almost no growth in funding for medical care over the past 10 years. In addition, numerous new benefits have been authorized without additional funding. Because our current Tricare contracts are “must-pay” bills for the Department, the only way to cover these rising costs is to divert resources from the direct care system and from accounts which should be funding oper-

ational medical requirements. Assertions that care can continue to be diverted to the private sector without impacting readiness or access have not been supported by data and the growing shortages of medical personnel nationally and the rapidly rising cost of commercial care appear to make this unsustainable course to enhance military medical readiness. Until this is addressed, we will continue to see declining operational medical capabilities and rising costs as more and more care is shifted to the private sector. Civilian healthcare is expensive; military healthcare, because of its unique additional requirements, is even more expensive. Like other military capabilities, there are no direct analogues in the civilian or commercial sector for all the capabilities needed by the military health system to be able to care for ill and injured servicemembers during a conflict. All of the Federal healthcare delivery systems (DOD, Veterans Health Administration, Indian Health Services, etc.) face some of the same challenges and all have very large, unfunded infrastructure requirements to sustain their ability to deliver care (e.g., DOD estimates an additional \$10 billion is needed to update or replace existing medical infrastructure). In many communities with aging Federal medical infrastructure, there is an opportunity to develop Joint Venture partnerships similar to the ones at Joint Base Elmendorf-Richardson, or Travis Air Force Base. In addition, creative financing mechanisms, like the Communities Helping Invest through Property and Improvements Needed for Veterans ACT (CHIP-IN Act), which pools Federal, State, local and philanthropic resources to fund infrastructure requirements, should be reauthorized and expanded to include the DOD. Finally, as authorized by Congress in the 2017 NDAA, the DHA must ensure accurate tracking and billing for services provided to non-DOD beneficiaries both within the direct care system and when military medical personnel are working in partner facilities. The mistaken belief that the military or other Federal health systems can be funded at lower rates than the civilian sector while achieving similar or better outcomes and be ready for future conflicts is a remarkably optimistic triumph of hope over reality. To begin to address this foundational problem, this Committee should:

- a. Require that any implementation of new benefits which are authorized in an NDAA cannot occur until there is an assessment by CJCS of operational impacts, an independent government cost assessment of the cost of mitigating the operational impacts and of the cost implementing the benefit in both the direct and private care system, and sufficient additional funding is appropriated in the Defense Health Program to cover these costs.
 - b. Direct that any proposed reductions in services at a military treatment facility can only proceed with an endorsement from the CJCS that there is no impact on operational requirements, and an endorsement from the Services that there is no impact on medical officer and enlisted training pipelines, and an independent attestation that there is sufficient excess capacity to absorb the workload to be shifted to the community, as well as congressional notification at least 180 days prior to implementation.
 - c. Direct the ASD(HA) to implement the necessary information technology tools and to promulgate policy on accounting for work done by uniformed medical personnel in civilian or Veterans Health Administration facilities.
 - d. Reauthorize the CHIP-IN Act and amend it to include DOD requirements.
 - e. Mandate that the DOD and VA provide a report to Congress in 6 months on how to consolidate inpatient care in communities where one or both Departments are requesting funding for infrastructure investments which exceed \$100 million annually.
8. *Uniformed Military Medical Leadership*: Congress wisely recognized that successful implementation of the reforms mandated by the 1986 Goldwater-Nichols Act required a new type of leader who understood the value of Jointness and who had personal experience in that environment. For a variety of reasons, military medical leaders have been exempted from this requirement, making them the outliers in the Department of Defense, with limited understanding of the opportunities and challenges implicit in the Joint Force. I recommend that this Committee should:
- a. Remove the Goldwater-Nichols Act exception for military medical General and Flag Officers;
 - b. Require that any future Directors of the Defense Health Agency must have previously served as either the Joint Staff Surgeon, or as a Combatant Command Surgeon and must have commanded a hospital which supported Graduate Medical Education programs.

ATTACHMENT 1

SUGGESTED NATIONAL DEFENSE AUTHORIZATION ACT LANGUAGE

Clarify that the military health system is a part of the military and, to the greatest extent possible, should use the same processes, procedures and measures used by the rest of the military, including:

A. Civilian oversight of the MHS: As in the rest of the military, the MHS is led by civilian leadership nominated by the President and confirmed by the Senate, acting under the authority which the Congress and the President have invested in the Secretary of Defense. The Assistant Secretary of Defense for Health Affairs (ASD(HA):

1. Serves as the principal medical advisor to the Secretary of Defense
2. Leads and provides oversight of the MHS and the Defense Health Program (DHP), including developing and executing an MHS Strategic Plan which will:
 - a. Require endorsement by the Chairman of the Joint Chiefs of Staff (CJCS) and the Secretary of Defense prior to transmittal to appropriate congressional Committees annually
 - b. Include measurable goals and objectives by quarter and fiscal year, including:
 - i. Readiness metrics approved and monitored by the Assistant Secretary of Defense for Readiness, in coordination with the CJCS, through the process used by the rest of the military to assess readiness of deployable and in-garrison capabilities, including
 - ii. All patient movement and Role 2 and above medical force elements
 - iii. Any required equipment or other assemblages
 - iv. Surveillance for and response to bioweapons
 - v. The percent of servicemembers by unit who are not medically ready.
 - vi. Quality metrics for assessing the effectiveness of care provided to DOD beneficiaries both in the direct care and the purchased care system, including access to care.
 - vii. Quality metrics developed by the Joint Trauma System, in coordination with the Joint Staff, Combatant Commands and Services, to assess the effectiveness of care provided in deployed locations and in the patient movement system
 - viii. Fiscal metrics assessing the efficiency of the direct care and purchased system against established targets, including targets for beneficiary enrollment and leakage to the purchased care system for each Military Treatment Facility
 - ix. Patient satisfaction metrics for both the direct care and purchased care systems
 - x. Availability of uniformed medical personnel for healthcare delivery, by location of assignment, when not deployed
 - xi. Metrics should be trended over time and, where available, should be compared to US national benchmarks
 - c. Service input to this plan is necessary, but Service concurrence is not required; the plan should clearly identify any goal or objective with which one or more Services does not concur.
3. Establishes necessary policies to ensure the MHS provides high quality care for all DOD beneficiaries; Joint Staff and Service input to MHS policies is necessary; critical non-concurrence with a proposed policy will be adjudicated as follows:
 - a. Policies affecting medical operational capabilities: Services, Combatant Commands, with support from the Director of the Joint Staff, will bring areas of disagreement to the Tank and then make recommendations to the Secretary of Defense
 - b. All other policies will be adjudicated through governance structures overseen by ASD(HA) or the Undersecretary of Defense for Personnel and Readiness.
4. Ensures that research funded by the Defense Health Program addresses the CJCS-identified gaps in knowledge impacting care for ill and injured Servicemembers.

5. Serves as the immediate supervisor of the Director of the Defense Health Agency (DHA).
 6. Is the final approval authority for all fiscal decisions related to the Defense Health Program (DHP) and communicates to Department of Defense leadership and to Congress the fiscal requirements for providing optimal in-garrison and purchased care, any gaps between requirements and resources and plans to mitigate those gaps.
 7. Provides the Services with a template for reporting quarterly on the location, availability for MTF utilization, and other responsibilities of all uniformed and civilian personnel funded or aligned in any way with each Service or sub-component.
- B. Chairman of the Joint Chiefs of Staff Oversight of Military Medical Operational Support
1. Operational and Contingency Plans. As defined by the President and the Secretary Defense in the Unified Command Plan, CJCS will ensure these plans clearly define:
 - a. Operational and training requirements for Role 2, 3, 4 and 5 deployed medical force elements and equipment with the goal of preserving the fighting force in order to win future conflicts by optimizing return to duty as quickly and safely as possible.
 - b. Operational requirements and resourcing for blood products (e.g., whole blood, freeze dried plasma, etc.) as close to the point of injury as possible using planning factors developed by the Joint Staff Surgeon, in coordination with the Combatant Command, Services and with concurrence from the ASD(HA).
 - c. Patient movement requirements for ill and injured servicemembers and other combatants who cannot be returned to duty, including those exposed to or infected with highly contagious infectious diseases.
 - d. Explicit acknowledgement of any reliance on allies or partners to provide medical care and attestation from Combatant Command that the Ally or partner has affirmed they have the necessary capabilities and capacity to provide this care to US personnel.
 - e. Ensure that the Integrated Continental United States Medical Operations Plan (ICMOP) includes
 - i. Requirements for acute and rehabilitative care for ill and injured returning to the US
 - ii. Requirements for patient movement from Aerial Ports of Embarkation and Debarkation to appropriate levels of care.
 - iii. Planning factors from the Department of Health and Human Services and the Veterans Health Administration for available beds once the National Disaster Medical System is activated
 - iv. Planning factors from the Tricare Purchased Care contractors for available beds within the purchased care system.
 - v. Supplemental funding estimates for sustaining care for in-garrison DOD beneficiaries and any beneficiaries reliant on DOD medical personnel who are tasked to deploy during a contingency
 - vi. Plans to expand blood collection, processing and delivery to DOD to meet operational requirements.
 2. CJCS oversight of medical readiness. In coordination with the ASD(R), the Joint staff will monitor, report and address readiness of all required medical capabilities listed above, using the same processes used for the rest of the military.
 3. CJCS oversight of Combat Support agencies: As with other Combat Support Agencies, CJCS will conduct a Combat Support Agency Review to assess the readiness and effectiveness of actions taken by the Defense Health Agency (DHA) to support Combatant Command (CCMD) and Service operational requirements and will provide an annual report to Congress summarizing progress and shortfalls in DHA's performance.
 4. CJCS will provide ASD(HA) with a prioritized list of knowledge gaps impacting care for ill and injured Servicemembers derived from input from the Combatant Commanders and Services.
- C. The Service Secretaries (Army, Navy and Air Force) will:

1. Organize, train and equip medical force elements to meet operational requirements defined by the Combatant Commanders through established CJCS and OSD processes.
 2. Organize, train and equip medical force elements to perform Joint Trauma System-required activities during contingencies and ensure data collection on all ill and injured personnel in accordance with JTS-defined requirements.
 3. Standardize all equipment in deployable assemblages across Services in accordance with JTS recommendations; exceptions to this requirement will require approval by the CJCS and Deputy Secretary of Defense, as well as notification to the Senate and House Armed Services Committees within 30 days of the exception being granted and before any acquisitions for Service-specific equipment is executed.
 4. Implement JTS-identified standardized training for deployable force elements (e.g., Role Two ground medical force elements, patient movement force elements, etc.)
 5. Report the readiness of all deployable patient movement and Role II and above medical force elements and equipment through processes established by ASD(R) and the Joint Staff.
 6. Fund operational medical requirements outside the scope of the DHP and inform ASD(HA) of any unfunded operational medical requirements and planned mitigation measures no later than the beginning of the third quarter of each Fiscal Year.
 7. Fund Service-specific research to enhance operational medical readiness and inform ASD(HA) of any unfunded operational medical requirements and planned mitigation measures no later than the beginning of the third quarter of each Fiscal Year.
 8. Provide DHA with quarterly updates on all uniformed and civilian personnel as described above.
 9. Ensure that Nominees to serve as the Director of the DHA must have served as either the Joint Staff Surgeon, or as a Combatant Command Surgeon and have commanded an MTF with inpatient capabilities and graduate medical education programs.
- D. Defense Health Agency as a Combat Support Agency:
1. The Joint Staff Surgeon will be dual-hatted as the DHA Deputy Director for Combat Support and will:
 - a. Provide direct oversight of the Joint Trauma System Director, in order to ensure the JTS:
 - i. Incorporates best practices and Clinical Practice Guidelines into the MHS Genesis and medical education programs for both officers and enlisted military medical personnel
 - ii. Provides requirements to the Services for data collection as far forward as possible, with reporting to Combatant Command Joint Trauma System offices.
 - iii. Identifies standardized, interoperable equipment for Service-provided deployable medical force elements which support CCMD operational requirements.
 - iv. Identifies and provides to the Services standardized, training for Service-provided deployable medical force elements which support CCMD operational requirements.
 - b. Provide direct oversight of the Director of the Armed Services Blood Program, in order to ensure the ASBP:
 - i. Develops planning factors for operational blood component utilization
 - ii. In coordination with USNORTHCOM, the Department of Health and Human Services and other stakeholders, plans to expand US blood collection, processing and distribution as needed to meet validated operational requirements.
 - c. Provide direct oversight of the Director of the Armed Forces Medical Examiner System (AFMES), in order to ensure the AFMES:
 - i. Reviews, in coordination with the Joint Trauma System, any deaths of uniformed or civilian military personnel while training, in-garrison or during contingency operations, including those for which a civilian medical examiner performs the forensic pathology exam

- ii. Prepares annual reports identifying opportunities to reduce risks to servicemembers.
- iii. Sustains accreditation by the National Association of Medical Examiners
- d. Provide requirements to update MHS Genesis and other MHS systems to optimize data collection, analysis and reporting in order to improve outcomes for ill and injured servicemembers.
- e. Provide oversight of public health activities aligned under the DHA as required by 10 U.S.C. § 1073c, as amended.
 - i. Ensure all DOD hospitals and overseas labs are transmitting the same standardized surveillance data to the Centers for Disease Control and Prevention as do other Public Health Jurisdictions.
 - ii. Partner with Services to ensure waste water surveillance is implemented at DOD installations.
 - iii. Implement biosurveillance programs to detect and mitigate the risk of naturally occurring and deliberate biological threats.
- 2. The Defense Health Agency will reinstate Defense Health Agency Procedural Instruction 6040.06, Combatant Command Trauma Systems.
- 3. Defense Health Agency and Health Care Benefit Delivery-all other functions of the DHA related to healthcare benefit delivery will be executed in a manner which:
 - i. Enhances readiness of the military health system to care for the ill and injured in future conflicts;
 - ii. Optimizes access to healthcare for DOD beneficiaries in the direct care system and, when necessary, in the purchased care system, with the objective of caring for those DOD beneficiaries with the greatest medical needs (i.e., the "highest acuity") in the direct care system, whenever possible;
 - iii. Optimizes health-related outcomes for DOD beneficiaries as effectively and efficiently as possible.
- E. Clarify the intent of Congress related to funding for the Military Health System including:
 - 1. Requiring that any new healthcare benefits are only enacted following:
 - a. Assessment endorsed by the CJCS of any impact on operational readiness of the proposed new benefit.
 - b. Completion of an Independent Cost Estimate endorsed by the Managed Care Support contractors and the ASD(HA) which mitigates any operational impacts and validates the cost of implementing the benefit
 - c. Appropriation of sufficient funding for the proposed new benefit
 - 2. Requiring notification to Congress of resource shortfalls which preclude delivering care in the direct care system which enhances the readiness of the military health system to care for ill and injured during future conflicts, or the care to which DOD beneficiaries are entitled.

Chairman WICKER. Thank you, Dr. Friedrichs.
Colonel Cannon.

STATEMENT OF COLONEL (DR.) JEREMY W. CANNON, USAFR (RET.), PROFESSOR OF SURGERY, PERELMAN SCHOOL OF MEDICINE, UNIVERSITY OF PENNSYLVANIA

Dr. CANNON. Chairman Wicker, Ranking Member Reed, and distinguished members of the Committee, thank you for the opportunity to testify. These comments are my own and do not reflect an official position of my employer, Penn Medicine, or of the Hoover Institution, where I current serve as a Veteran Fellow.

As a practicing trauma surgeon, I have cared for injured warfighters in both Iraq and Afghanistan. I have directed the DOD's only Level I trauma center, and now I lead a Penn Medicine Navy partnership for trauma training. I know firsthand what it takes to save lives on the battlefield and what happens when we fail to sustain medical readiness.

I want to start by sharing the story of the unexpected combat casualty survivor that I took care of in 2010. Note, I will use a pseudonym throughout my comments for patient privacy.

U.S. Army Sergeant Erik Ramirez was on patrol in Afghanistan when a sniper's bullet tore through his chest, just above his body armor. His injuries were truly catastrophic. But thanks to decades of investment and innovation in combat casualty care, a military trauma team pulled him up out of his certain death spiral by placing him on heart and lung bypass, on the battlefield. Days later, I had the honor of caring for Sergeant Ramirez in the United States, as he reunited with his family.

This unequivocal display of medical supremacy was not accidental. It was built on years of research, training, and policy reforms. But I fear that if Sergeant Ramirez suffered this same injury now, he would die a preventable death on the battlefield.

Today, only 10 percent of military general surgeons get the patient volume, acuity, and variety they need to remain combat ready. We are actively falling into the trap of the peacetime effect.

Meanwhile, as the MHS struggles, our enemies continue to grow stronger. Projections estimate a peer conflict could produce as many as 1,000 casualties per day, for 100 days straight, or more, a scale not seen since World War II. Neither the current MHS nor the civilian sector can absorb this impact. What's more, many of these patients will have survivable injuries, yet one in four will die at the hands of an unprepared system.

How can we meet this living threat? First, we must clearly articulate the root problem of our failed readiness efforts. No one in DOD truly owns combat casualty care. In 2017, the Joint Trauma System (JTS), was codified in law. This Committee must now strengthen the statutory language to affirm that JTS owns combat casualty care and to provide this precious resource with both top-down authority and bottom-up support.

Then we must push the MHS to refocus on forward-deployed care, the one thing that only military medicine can do. For this I recommend three lines of effort.

First, clinical training. In order to train the way we fight, we must establish five to six high-volume Military Treatment Facility Centers of excellence for both trauma and burn care. These centers must undergo civilian accreditation and fully integrate into a national trauma and emergency preparedness system.

We also need to strengthen and expand our military-civilian partnership sites where military trauma teams manage critically injured patients on a daily basis, like my partnership program at the University of Pennsylvania. To do so, Congress must reauthorize the Pandemic and All-Hazards Preparedness Act and fully appropriate the Mission Zero Act.

Second, combat casualty research. To succeed on complex future battlefields, DOD medical research must refocus on pre-hospital care, team training, bleeding control, battlefield blood transfusions, regenerative medicine, and long-term outcomes. In order to fully understand the effects of battlefield treatments we must link DOD Trauma Registry data with VA records.

Finally, we need to unify military trauma system strategy. We must urgently develop and implement a whole-of-society roadmap,

aligning military, VA, and civilian systems for both peacetime readiness and large-scale combat operations.

The bottom line, if we maintain the status quo and enter a peer conflict unprepared, we will condemn thousands of warfighters to preventable death. Without urgent intervention, the MHS will continue to slide into medical obsolescence. To restore the medical supremacy that saved Sergeant Ramirez, we must act now. Mr. Chairman, members of the Committee, our warfighters and our Nation deserve medical supremacy.

Thank you for your time, and I look forward to the comments.
[The prepared statement of Dr. Jeremy W. Cannon follows:]

PREPARED STATEMENT BY COLONEL (DR.) JEREMY W. CANNON, USAFR (RET.)
PROFESSOR OF SURGERY, PERELMAN SCHOOL OF MEDICINE UNIVERSITY OF PENNSYLVANIA

Chairman Wicker, Ranking Member Reed, and distinguished members of the Committee, thank you for the opportunity to testify on the urgent need to restore and sustain military medical readiness in the face of large-scale combat operations (LSCO).

As a practicing trauma surgeon with multiple combat deployments, I have seen the full gamut of combat casualty care from far forward in Iraq and Afghanistan to Brooke Army Medical Center where I served as Trauma Medical Director for the Department of Defense's (DOD) Level I trauma center during the height of combat operations. I now serve in a different capacity as Assistant Dean for Veteran Affairs for Penn Medicine and as an attending in the Surgical Intensive Care Unit in our Veterans Affairs (VA) Medical Center in Philadelphia.

At Penn Medicine, I am also proud to lead an embedded US Navy trauma team as the civilian surgeon champion. This partnership enjoys enthusiastic support from deeply invested Penn Medicine leaders including our Chief Executive Officer, Mr. Kevin Mahoney. As a reservist, I worked with RADM (Dr.) David J. Smith in Health Affairs where I first appreciated the importance of good policy to mission success, and now as a Veteran Fellow at the Hoover Institution, I have the opportunity to study the effects of military health policy over time. Finally, like many of you and my colleagues here today, I have multi-generational family ties to the military with my oldest son now training as a Naval Intelligence Officer.

I want to start by sharing a story of an unexpected combat casualty survivor. In 2010, US Army Sergeant Erik Ramirez* suffered a devastating chest injury while on patrol in Afghanistan. A sniper's bullet passed just above his body armor, tearing through the airways and vessels in his right lung. What happened next was nothing short of a medical miracle. After damage control surgery to arrest the bleeding, SGT Ramirez was placed on heart and lung bypass on the battlefield. With this heroic intervention, he pulled up out of a spiral of certain death, and a few short days later, I had the privilege of caring for him as he was re-united with his family in San Antonio.

* Name changed for patient privacy

The survival of SGT Ramirez resulted from decades of investment in combat casualty care. Through the efforts of many dedicated military and civilian visionaries, we established a cutting-edge trauma system in the heart of a combat zone. Through these intensive efforts and close collaboration with line leaders, we achieved the best survival rate on any battlefield in history. In sum, we achieved medical overmatch and leveraged our medical supremacy into a strategic advantage.

But I fear that if SGT Ramirez suffered the same injury in combat today, he would not survive. Why? In short, combat casualty care training and skills maintenance lose out in peacetime. Since the end of combat operations in Iraq and Afghanistan, we have seen a systematic erosion of military medical readiness. Today, fewer than 10 percent of military general surgeons get the critical case volume and patient acuity they need to be combat-ready.(1)

What is the cost of this erosion? It can be measured in lives lost: one in four battlefield deaths are potentially survivable. This reflects what I term the medical "peacetime effect"—a recurrent failure to sustain combat medical capabilities between wars. Although this cycle has played out for centuries, today's peacetime effect is driving us toward medical obsolescence precisely as our adversaries' power is ascendant. Should a large-scale conflict materialize, we anticipate casualty numbers as high as 1,000 per day for at least 100 days—casualty loads not seen since

World War II, a scale far beyond what our current system can handle.(3) True medical readiness could mean the difference between winning and losing.

The challenge of maintaining a ready medical force during peacetime represents a true “wicked problem.” Yet, one of the root causes of this erosion in our medical readiness is clear: no single entity in the DOD truly owns combat casualty care. COL (Dr.) Bob Mabry, a decorated hero of the battle of Mogadishu, warned in his testimony to the House Armed Services Committee nearly a decade ago, “When everyone is responsible, no one is responsible.” To this day, combat casualty care responsibility remains fragmented across military departments, the Defense Health Agency, and individual service commands. With ongoing diffusion of responsibility, we will fail, and our warriors will die needlessly.

TOP PRIORITY: ESTABLISH CLEAR OWNERSHIP OF COMBAT CASUALTY CARE

Combat casualty care represents a critical warfighting capability—the equivalent of a high-value weapon system, not just a cluster of medical tents deployed in a contingency environment. To ensure the optimal use of this valuable asset, the Armed Services Committee should establish clear ownership of combat casualty care within the DOD. To accomplish this objective, I strongly recommend both elevating and streamlining the reporting structure for the MHS. Command and control of the MHS should be commensurate with the importance of the mission. The Joint Trauma System (JTS) must have direct responsibility for and authority over all aspects of combat casualty care policy, training, and readiness. The JTS Director should report directly to the Secretary of Defense through the Joint Staff Surgeon. This organizational construct will ensure combat casualty care is fully aligned with our contingency operational strategy.

With a clear line of responsibility and authority for combat casualty care, we can then restore and sustain military medical readiness for LSCO by focusing on three key areas:

- 1) *Clinical Training and Sustainment: Joint Military Trauma/Burn Centers of Excellence, National Disaster Medical System, and Civilian Trauma/Burn Partnerships*

Combat trauma readiness requires military medical personnel to have routine exposure to high-acuity trauma cases, something that most military treatment facilities (MTFs) currently lack. To correct this, we must consolidate military trauma training into a select group of five to six joint MTFs verified and designated as trauma and burn centers of excellence by civilian accrediting bodies. These trauma/burn MTFs must fully participate in the civilian trauma system organized around a series of Regional Medical Operations Coordinating Centers (RMOCCs).

These trauma/burn MTFs must also align with the National Trauma and Emergency Preparedness System (NTEPS), a concept developed by the American College of Surgeons Committee on Trauma.(4) Utilizing RMOCCs as its basic unit of action, NTEPS provides a framework to integrate daily trauma care with mass casualty preparedness, ensuring that the US trauma system—including military, VA, and civilian resources—can seamlessly scale to handle mass population events including large-scale combat operations, acts of terrorism, natural disasters, or pandemics. At this critical moment, the Armed Services Committee should enact statutory authority and identify a lead agency to effect this essential alignment between these trauma/burn MTFs and NTEPS.

Military, VA, and select civilian patients should preferentially be funneled to these regional trauma/burn MTFs. Legislative authority to manage civilians in these centers already exists, although coding and billing best practices represent opportunities for continued improvement. By increasing the clinical volume and acuity in these five to six large MTFs, we will also ensure that our military Graduate Medical Education (GME) programs provide exceptional training aligned with contemporary operational needs.

Beyond these five to six trauma/burn MTFs, the current small network of military-civilian partnership programs (MCP) must be expanded. To meet the scale of the readiness need, existing and future MCP sites must be high-volume civilian trauma centers where military trauma teams can be embedded as part of an integrated readiness plan.(5) Access to burn training and opportunities to embed critical wartime GME training slots within these programs should also rank as preferred features of prospective sites.

Opportunities for the Committee to support MCPs include:

- **Mission Zero Act (MZA)**—This initiative funded under the Pandemic and All Hazards Preparedness Act (PAHPA) supports military trauma teams embedded within high-volume civilian trauma centers, including our center at Penn Medicine. To continue this high-yield investment in clinical training, PAHPA needs

immediate reauthorization with full MZA appropriation. Future expansion of this program should include DOD funding as well.

- **Military Health System Strategic Partnership with the American College of Surgeons (MHSSPACS)**—This joint military partnership with an academic surgical society seeks to improve surgical care for both military and civilian patients by fostering collaboration, exchanging best practices, and advancing military education, research, and quality initiatives. An expanded role for MHSSPACS should include 1) verifying MCPs using accepted requirements and quality standards and 2) advising the JTS on military-civilian trauma system integration to optimize medical readiness for both the MHS and civilian healthcare. MHSSPACS-type partnerships should expand to other critical war-time specialties beyond surgery.

2) Research: Focus the DOD Medical Research Budget on Combat Casualty Care

The Defense Health Program (DHP) funds a wide range of research, but we must refocus efforts principally on combat casualty care—from injury prevention to pre-hospital care and acute surgical care through to rehabilitation and recovery. Research should prioritize pre-hospital care (including prolonged field care), hemorrhage control, battlefield resuscitation, rehabilitation, and regenerative medicine. These research efforts must also consider potential peer-adversary threats within a multidomain (land, air, sea, space, and cyber) battlefield environment. I encourage you to work with your colleagues on Defense Appropriations to prioritize research funding in these key areas of direct relevance to the warfighter with applications to other domains of public concern including emergency medical services, law enforcement as medical first responders, civilian trauma, and disaster response.

We must also eliminate barriers to understanding long-term outcomes following combat injuries by linking DOD Trauma Registry (DODTR) records with current VA medical records at the individual patient level. Further opportunities for improving battlefield survivability and optimizing outcomes lie in fostering partnerships with trusted academic research institutions with the wherewithal to innovate in prehospital care, trauma and burn management, traumatic brain injury, and the psychological and ethical aspects of LSCO. Such investments will fill a need not addressed by the National Institutes of Health and other agencies that fund medical research, and they will benefit both warfighters as well as civilians impacted by acts of terrorism, acts of war, and natural disasters.

3) Policy: Develop and Implement a Unified Joint Military Trauma System Strategy

Decades of reports from the Government Accounting Office, RAND, the National Academies, and past congressional hearings all point to the same conclusion: we lack a coherent, unified strategy for military medical readiness that will deliver expert trauma/burn care on future battlefields while also benefiting civilian trauma care and public health. In the words of Nadia Schadow, a colleague at the Hoover Institution and the primary author of the 2017 National Defense Strategy, generating more reports or commissioning new studies will only perpetuate the “crisis of repetition.”

To break this cycle, I am currently working with Uniformed Services University and other key stakeholders to develop a comprehensive military trauma system policy roadmap that considers the direct care component, civilian partnerships, the role of the National Guard and reserves, synergy with the VA, involvement with NDMS and NTEPS, research priorities, and training requirements. This roadmap will need congressional support to succeed.

THE BOTTOM LINE: WE MUST DEMONSTRATE MEDICAL EXCELLENCE FROM DAY ONE

In Iraq and Afghanistan, it took us three to 4 years to develop a trauma system in theater and another five to 6 years to achieve the medical supremacy that allowed us to save SGT Ramirez. We will not have 10 years in the next war.

A near-peer conflict—whether in the Pacific, Europe, or beyond—will generate massive casualty numbers from day one. If we enter that fight unprepared, we will condemn thousands of our warfighters to potentially preventable death. As General Peter Chiarelli painfully noted in his testimony for the National Academies, “You have just got to pray your son or daughter or granddaughter is not the first casualty of the next war.”

Will it take another Pearl Harbor or 9/11? Or do we have the will to act now to re-establish and sustain our medical supremacy before the first shot is fired? I submit that we cannot allow history to repeat itself by sending the next generation of our warriors into combat without a fully ready medical service supported by a highly functioning JTS. Mr. Chairman, members of the Committee, our warfighters deserve military medical supremacy.

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Chairman WICKER. Thank you, Dr. Cannon, and I commend each of you for your excellent testimony.

Let me just get quick answers here from all three of you. I think what I am hearing from all three of you is that this is going to require more than simply good management of what we have on the books now. Each of you is recommending changes in the statute that need to come in this coming NDAA. Is that right, Dr. Robb?

Dr. ROBB. Yes.

Chairman WICKER. And Dr. Friedrichs?

Dr. FRIEDRICHS. Yes, sir.

Chairman WICKER. And Dr. Cannon?

Dr. CANNON. Yes, Mr. Chairman.

Chairman WICKER. All right. Let's talk about military surgeon readiness for combat care. There was a study out in 2021. It found that the population of military general surgeons meeting necessary readiness standards decreased from an already low 17 percent in 2015 to about 10 percent in 2019.

We will let all three of you take a brief chance at answer this. Why is this happening, and what specifically can DOD do to reverse this trend? And we will just start with Dr. Robb and go down the table.

Dr. ROBB. We will try to share different perspectives here. I think it comes back to the system to be able to resource the requirements that we need. So, for example, if you want to look at what Dr. Cannon referred to as the five to eight, what we call critical Military Treatment Facilities, in order for us to provide a higher volume, high acuity care, they need to be resourced. And I think that is the challenge that we all face right now, is what is that strategic reserve with our Military Treatment Facilities, and then how you augment that with the VA and the Department of Defense partnerships, and then how do you augment that with the military—

Chairman WICKER. Is that what he called the centers of excellence?

Dr. ROBB. So I would call them—that is one way to call them, but I, coming from the airlifter world—in fact, General Friedrichs and I would both say follow the casualty flow. And the casualty flow comes in from United States Indo-Pacific Command (INDOPACOM) to primarily we will be coming to two or three Military Treatment Facilities. From United States Southern Command

(SOUTHCOM) they will be coming into the National Capitol region. And then from Europe, United States Central Command (CENTCOM) and United States African Command (AFRICOM), they will be coming into primarily National Capitol region and then with a popoff at Portsmouth.

Chairman WICKER. Okay. Dr. Friedrichs, is this 10 percent number a concern, and why do we have 10 percent of military surgeon readiness?

Dr. FRIEDRICHS. Mr. Chairman, it absolutely is a concern. When I did my training in the military, I trained at the old Wilford Hall, that was a Level I trauma center. I took care of trauma patients because it was a 36 on, 12 off schedule every other night. Or I took care of vascular surgery patients. Or I took care of cardiothoracic patients. We de-scoped our facilities to the point that they take care of low-acuity community hospital patients, not trauma patients.

So I would reiterate the point that you have heard all three of us make. We need our key hospitals to be Level I trauma centers in partnership with the American College of Surgeons in the communities in which they are located.

But to do that we must address the elephant in the room, and that is resourcing. The medical inflation rate, on average, since 1938, is 5.1 percent per year, and the military has seen a net 12 percent reduction in funding. There is no way to fix these problems if the Military Health System is viewed as a bill payer and not something worth investing in.

The second point that I would make is we have got to reiterate the intent that you and the Ranking Member mentioned. I spent 4 years as the Joint Staff Surgeon. Almost every meeting in which I participated in that role focused on roles and responsibilities and patches, not on patients. Please, again, I implore you, kill this narrative that somehow there is a belief that we can unwind things and go back to the good old days. We need to go forward toward a more integrated system that focuses on patient care and, as you said, on readiness, not continuing to focus on bureaucratic buffoonery.

Chairman WICKER. Dr. Cannon.

Dr. CANNON. Mr. Chairman, it is shocking, astonishing, and awful, and it has to be reversed. That 10 percent number results from inadequate, actually grossly inadequate, patient numbers, volume. They are not doing the cases. They are not doing the procedures. They are not doing what they were trained to do, and that is because they do not have the patients in the facilities. They are, in many cases, not designated or verified trauma centers, so they are scrounging around, trying to get cases, and it has been, frankly, an uphill climb. So we have got to provide them the patients, the cases, the experience to right that 10 percent number.

Chairman WICKER. Thank you very much, gentlemen. Senator Reed, you are next.

Senator REED. Thank you very much, Mr. Chairman, and gentlemen, thank you for your excellent testimony.

In the 2023 memorandum by the Deputy Secretary of Defense, one of the key points, I believe, is the direction to reattract beneficiaries to the MTFs, which would increase the patient flow, in-

crease the demands on physicians, et cetera, and also save money, they believe.

Dr. Friedrichs, your response to this approach.

Dr. FRIEDRICHS. I strongly support the vision that Deputy Secretary Hicks laid out, which is very similar to the vision that Deputy Secretary Norquist laid out in the previous administration, and almost every administration prior to that. Again, to do that we must have resources.

I will offer one other option which I think you have heard all three of us touch on briefly. Every single patient in the Veteran Health Administration started in DOD. I had the great privilege of commanding the DOD/VA joint venture facility in Anchorage, and I can tell you that when the patient walked in the door, they were taken care of by a joint team. It was far more efficient than building duplicative adjacent facilities. Instead, we built integrated adjacent facilities.

There is a \$10 billion, unfunded recapitalization bill in the DOD, \$100 billion, unfunded recapitalization bill in the VA. There are real opportunities to bring those higher acuity patients from the VA into the DOD facilities, or bring DOD medical personnel into the VA facilities, so that we are not wasting money on duplicative buildings and instead focusing our resources on the patients who need our care.

Senator REED. Thank you. And General Robb, or Dr. Robb, or both, do you think the Military Health System is adequately focused on the combat-related medical capabilities? I have heard comments by all the panel suggesting that they are diverted into things that are not effective in a combat situation.

Dr. ROBB. Well, I think, in fact, I would kind of like to challenge the misnomer that there is a separation between care beneficiaries and medical readiness. And I would argue, the way that we get our skills—primary care, specialty care, and just as important, our allied health, pharmacy, x-ray techs, logistics—we get that by taking care of our beneficiaries.

So what I think is so, so, important is that we use—not use, but that we care for our patient population to best achieve medically ready, in a ready medical force. And what I think is really important is that, again, we have to create a capability. It has to be an enterprise approach. And when we talked about it, again, I will go back to the point of follow the casualty flow, and you look at those critical hospitals that we believe are important, we must staff those. And we must staff those to the fullest extent possible.

You cannot reattract patient care into our MTFs unless you staff them, and I think that is what is key. If I cannot get an appointment, then I cannot get an appointment. So that is what is key.

So if you talked with Walter Reed, for example, they may have enough surgeons, but for various reasons the support staff does not exist, so they do not have the throughput that they need for surgical cases. The case load is there.

So what I think we need is an enterprise approach, and how do we resource, okay, the full spectrum of support for our critical care hospitals, and then make up the delta with our military VA partners and with our military-civilian partnerships.

Senator REED. Thank you. Dr. Cannon, your comments, please.

Dr. CANNON. Senator, I think it is vitally important to have highly functioning, premier medical centers that we can be proud of, that our surgeons and other specialists and allied health members want to be a part of. Right now, many of these facilities are shells of what they used to be. You heard about Wilford Hall. That was an amazing facility that did so much good for so many decades.

The new incarnation, Brooke Army Medical Center, the San Antonio Military Medical Center, is also amazing, but it is sort of out on the vanguard by itself. We need other premier flagship centers. And I think we can do it. We have got the pieces in place, but we have got to commit to keeping the combat casualty at the center of our focus, and make it happen.

Senator REED. Thank you. My time has just about expired, but a yes, no, or perhaps answer. I am concerned about the ability to mobilize medical professionals for an all-out fight. Is that a valid concern? Yes or no, please.

Dr. ROBB. Yes.

Dr. FRIEDRICHS. It is the billion-dollar concern. The Israelis have proved that. And we have a shell game right now with our Guard and Reserve and civilian facilities. We are going to pull them out, deploy them, and assume that civilian facilities, which during COVID required 70,000 military medics to take care of the surge in demand, instead lower their staff and then take care of a surge in demand. The math does not work, even for a Louisiana Public School grad.

[Laughter.]

Chairman WICKER. Dr. Cannon, go ahead and answer the question. Take the time.

Dr. CANNON. Yes, I agree. It is a concern.

Chairman WICKER. Thank you. Senator Fischer.

Senator FISCHER. Thank you, Mr. Chairman. Thank you all for being here today.

I really appreciate the information that you are giving us, and also the concern you have with the direction that we are not headed yet. In the Fiscal Year 2020 NDAA, a pilot program was established to assess the National Disaster Medical System (NDMS) and hopefully that it would increase not just capability but also capacity within that. In a conflict, you know, we have touched on that already. We have to be able to quickly disperse and absorb casualties throughout the United States.

Dr. Friedrichs, why is it so important for the NDMS to maintain this surge capacity?

Dr. FRIEDRICHS. Senator Fischer, first, thank you for the role that you and your colleagues from Nebraska played in championing this and highlighting this. It is important because the Military Health System does not have the capacity to care for every casualty coming back. We do not have the capacity to care for the people in peacetime right now. So to think that somehow we can do this on our own is another mistaken belief.

During the cold war, we recognized that if our Nation went to war, we would go to war together, and that we would do it with an integrated system with DOD, the Veterans Health Administration, and civilian partners. We must rejuvenate the NDMS, not let it continue to atrophy.

Senator FISCHER. So what is the next step in this pilot program?

Dr. FRIEDRICHS. So the next step is to make this not a pilot program but to reiterate that this is, indeed, the intent of Congress, that the NDMS is the framework in which we integrate our ability to deal with either surges in military patients or, in the event of a natural disaster, surges in civilian patients. But that is the framework.

A subset of that are the Respect Centers, which you are very familiar with, the regional Emerging Special Pathogen Centers that are designed to take care of patients exposed or infected with high-consequence infectious diseases. And another subset of that is the trauma system that Dr. Cannon so nicely described.

We need your help to articulate in law that we must work as a nation and as a team. We are short 300,000 nurses nationally. The projections are we will be short 130,000 doctors by 2035. There is no way that we can do this individually. We must do it together, and I urge you to codify the NDMS pilot and make that the intent, moving forward.

Senator FISCHER. Dr. Cannon, Dr. Robb, anything to add on that?

Dr. CANNON. Senator, I would just advocate for what my colleague, General Friedrichs, just said, but we need to put our foot on the gas. We do not have 5 years, 10 years, 20 years. We need the solution really now.

Senator FISCHER. Dr. Robb?

Dr. ROBB. Yes, I concur with both their comments. And going back, the fact that we dual-purpose these assets, these expensive assets, to solve problems both in the military and civilian sector, but they are mutually synergistic. So absolutely, we need to press forward.

Senator FISCHER. Thank you. Dr. Friedrichs, you mentioned the University of Nebraska Medical Center and working with an academic institution. Can you explain to the Committee the benefits of those partnership with academic institutions in particular, and what that can yield for the Military Health System?

Dr. FRIEDRICHS. Thank you very much, Senator Fischer. The first benefit is we share and exchange information. University of Nebraska has established, without a doubt, one of the premier programs for treating casualties or patients who are exposed to highly contagious infectious diseases, and they have got remarkable onsite training, which they built in partnership with the United States Air Force. This is a great example of a military-civilian partnership in which the exchange of ideas improves care, both for military and civilian patients.

But the other thing that we can learn from our civilian partners is something that I offer to the Committee to consider, the CHIP IN Act, which was originally passed to allow for blending of funding to build new VA facilities. It should be expanded to include the DOD. We cannot afford to keep building duplicative facilities, and the CHIP In Act was a great way to allow the blending of Federal, State, local, and philanthropic funds so that we can most efficiently care for this diverse patient population.

Again, I commend the University of Nebraska for the pioneering work that they have done in showing what a good mil-civ partnership looks like.

Senator FISCHER. Thank you for the shout-out on the CHIP IN Act. That bill was written in my office, so thank you very much.

Dr. Cannon, as a professor of surgery, do you have anything to add on that?

Dr. CANNON. I would just comment that these mil-civ partnership sites can be incredible assets for force generation, for building up that next generation of future leaders in surgery and other combat-relevant specialties. And these are epicenters of academic excellence where we can truly inspire that next generation.

Senator FISCHER. Thank you. Thank you, Mr. Chairman.

Chairman WICKER. Thank you, gentlemen. It seems to me that the State of Nebraska must have excellent representation in the U.S. Congress.

Senator Shaheen.

Senator SHAHEEN. Thank you all very much for being here today.

Dr. Robb, you discussed the impact of declining budgets on the Defense Health Agency. As a former director, can you talk about how late budgets and operating under continuing resolutions, continued budget uncertainty affects the readiness of the Military Health System?

Dr. ROBB. When I look back—in fact, I will go back in history, because I was part of that. When we initially stood up to the Defense Health Agency in response to the perception that we had 10 percent of the DOD's overall budget, and then fast-forward to 12 years later and now we are actually less than 10 percent. And we were meeting not quite but most of our demands back then. But as I watch, we have had increasing combatant command requirements with a decreasing defense health program.

And what that has forced us to do is we have seen a couple of challenges, and there are multiple things going on. But the military departments, their end strength has gone down, and the way we man those hospitals is with a certain percentage of military members. And as Dr. Friedrichs said, you just cannot buy health care professionals off the streets.

So when we cut the end strength then we apportion this care downtown, and then that increased TRICARE budget, but then we have to pay with bag one money, which is direct care money, to pay direct care. So now we actually have an internal shrinking of our budget. So it has been challenging for the Defense Health Agency to manage a set of Military Treatment Facilities with that to be the current business process.

Senator SHAHEEN. And is it fair to say that budget uncertainty exacerbates that problem—

Dr. ROBB. Oh, absolutely.

Senator SHAHEEN.—that continuing resolution exacerbates that problem?

Dr. ROBB. Absolutely. Yes, ma'am. Yes, ma'am.

Senator SHAHEEN. Thank you. Dr. Friedrichs, you mentioned the National Guard, and one of the things I know, the National Guard, as we all know, is assuming a greater role in actual deployments and picking up work for the regular military. I could probably say

that more eloquently, but they are taking on a much bigger role than they did 30 years ago. Yet the National Guard does not have the same coverage for health care that our regular military does. Despite the challenges that you all have identified, it is even a greater problem for the National Guard.

Can you speak to what we ought to be thinking about as we are thinking about how do we ensure that the Guard actually has the health care they need so that they are ready to go if they are called to deploy or called into combat?

Dr. FRIEDRICHS. Thank you, Senator Shaheen, and I will start, if I may, first with your premise that there is an increasing demand signal. The decision to take down the United States Agency for International Development (USAID) and most of its capabilities is almost unquestionably going to drive more demand on the Department of Defense. USAID provided countless services for disaster response and for work with allies and partners around the world.

Senator SHAHEEN. And for global health.

Dr. FRIEDRICHS. And for global health, and for biosurveillance, and many other roles. In the absence of USAID, we either agree that when Americans are caught in a disaster they are on their own, or we are going to turn to the only other organization that has those kinds of capabilities, and that is DOD. So we should, I am afraid, expect to see more demand on DOD as a result of those changes.

To your point about health care preparedness, when we look back at why people, shortly after deployment, have to be pulled off the line, interestingly it is dental care primarily among the Guard and Reserve, who do not have ready access to that. I think if we are serious about a smaller force that must be ready on a moment's notice, we are going to have to address how to ensure that force is ready, when needed, to go forward, and that is medically ready, as well as ready and proficient with whatever their assigned task is.

Senator SHAHEEN. And we are learning a lot of lessons on our industrial base side, from the war in Ukraine right now, and a lot of lessons about the conduct of war today. Are we learning anything about the health care system and what we ought to be thinking about from what is happening in the war in Ukraine? Anybody.

Dr. FRIEDRICHS. If I may, I will just quickly say, having just been with the Ukrainian Surgeon General, absolutely. What they have found, first and foremost, is they are in the kind of conflict we will likely be in, and in the absence of air superiority, contested logistics, you must have a functioning system that is integrated. And this gets back to Senator Fischer's question about the National Disaster Medical System.

They are also learning the importance of supply chains. When we looked at this at the Joint Staff, we found that a significant percentage of the pharmaceuticals in our deployable assemblages actually rely on ingredients from countries that may or may not be willing to continue to provide those in the next conflict. Same song, next verse, with medical equipment.

I urge you, as I said in my written statement, to require the Department to give you an accounting for our vulnerabilities in that

area and a plan to address them. There are ways to do that. We need a strong push, I would submit, to actually accomplish that.

Senator SHAHEEN. Thank you very much. Thank you all.

Chairman WICKER. Thank you, Senator Shaheen.

Dr. Cannon and Dr. Robb, do you want to elaborate on what Dr. Friedrichs said about USAID?

Dr. CANNON. Sure. That is out of my domain so I do not have anything.

Chairman WICKER. Very well, then. Yes.

Dr. ROBB. I would concur, one, with his comments, but number two, again it is mostly out of my domain currently.

Chairman WICKER. All right. Thank you very much. Senator Cotton.

Senator COTTON. General Friedrichs, I would like to continue with the answer you just gave to Senator Shaheen about our dependence on other countries for drugs and precursors, specifically Communist China. The United States relies heavily on Communist China for basic drugs and so-called Active Pharmaceutical Ingredients (APIs). Providers obviously need this, not just in the civilian world but in the military world, especially to treat combat casualties. China, for instance, has 80 percent of the global supply chain of antibiotics.

How could Communist China use this dependence of ours to its advantage if there were a major conflict in the Pacific?

Dr. FRIEDRICHS. Thank you very much, Senator Cotton, and I think we have seen examples of this with rare minerals and other things that China largely controls the supply chain for, in that they will choose to titrate that supply chain based on their satisfaction or dissatisfaction with those trying to purchase those items.

I had the great privilege in my last role of working with India, the European Union (EU), Japan, and Korea on a consortium in which we began to identify ways to leverage new technologies to change and to broaden our supply chains. And I encourage this Committee to direct the Department of Defense, in partnership with the Department of Health and Human Services, to continue exploring those options.

What we found was in many cases, as in the case of antibiotics that are based on penicillin, the Japanese have already made a tremendous investment in the ability to produce those APIs within Japan. We should be partnering with them and creating an environment in which at least the DOD and the VA purchase from Japan to help sustain that production base and ensure that we have the access that we need.

There are many more examples. I touched on some of them in my written statement. But there are ways to mitigate this.

Senator COTTON. And your answer to Senator Shaheen said that Congress should push the Department of Defense to catalog all of these dependencies. It sounds like you are saying we also need to push to eliminate, or at least significantly curtail, these dependencies, as well. Is that right?

Dr. FRIEDRICHS. Absolutely.

Senator COTTON. And you mentioned four different sourcing options—South Korea, Japan, the EU, and India. Those first three are advanced industrial democracies, just like ours. If they can

produce these items, like acetaminophen or ibuprofen or penicillin, at a reasonable cost, surely the United States could do so, as well, right?

Dr. FRIEDRICHS. I believe that is the case. And what we found is that particularly in these countries they have created an environment in which it was financially possible for companies to produce these items within their country. We have not done that here in the United States. But a thoughtful industrial policy that was focused on resilience and national security, as well as economic security and health security, could do that for us, as well.

Senator COTTON. It is fair to say that between the two of them, the Department of Defense and the Department of Veterans Affairs, sure does have a lot of purchasing power to create a domestic market for the production of these fairly basic and longstanding medicines, right?

Dr. FRIEDRICHS. Absolutely. About 8 percent of the market—and it get back to Senator Shaheen's point about continuing resolutions and predictability. If companies know that they have a predictable demand signal, they will build to it. If they have an episodic or random demand signal, they will let somebody else deal with that.

Senator COTTON. General Robb, I have noticed you nodding your head vigorously, so please get off your chest everything you wanted to add to General Friedrichs' answers.

Dr. ROBB. Yes. Also, and I am sure you are aware, and this has been the direction from questions asked by our Congress, the Center for Health Services Research at the Uniformed Services University has been tasked, along with the Defense Logistics Agency, to catalog and specifically look at what, and define the problem what is, the Department of Defense's reliance on the medicines that we have talked about that are primarily sourced from China and from India, which would then help what I would call inform the decisions a way ahead of whether you, what I call it, ally shore, or near-shore, or on-shore, as Dr. Friedrichs discussed, in looking at a way forward.

But they are creating that, you know, what is the data to drive the decision and the investment. Thank you.

Senator COTTON. Thank you, gentlemen, both, for your answers. It has long been the case that the Department of Defense, acting at congressional direction, has mandated the domestic purchase of many uniform items, so I think surely we should make sure that our troops have the medicines they need to stay healthy, or to recover, as needed.

Chairman WICKER. Thank you, Senator Cotton. Senator Kaine.

Senator KAINE. Thank you, Mr. Chairman. Thank you to the witnesses. I want to particularly recognize Dr. Cannon. I know you are very well-prepared for this hearing today because one of the leaders that is with you, Kristin Malloy, used to be on my staff, and she made sure I seemed a lot smarter than I was at any hearing that I attended.

You know, I think I want to focus all of your attention on the workforce issues, because I am on the Health, Education, Labor, and Pension too, and if I go to my hospitals and health care providers they are singing the blues about workforce, tight labor market, difficulty hiring and retaining folks.

I went to the grand opening of the new VA clinic in the Fredericksburg area two Fridays ago, and we built it to the tune of about \$350 million. And we built this state-of-the-art clinic, with one step down from a hospital, because there were multiple clinics in the area, and veterans were having to go from pillar to post to get care rather than a single place.

But when we opened it, and I was there for the opening, I had staff say, "We are on a skeleton crew." The three VA hospitals in Virginia—Salem, Richmond, and Hampton—are laying people off. There are hiring freezes. There are plans for even more layoffs. So the estimates I was getting at that grand opening is they are probably 20 to 50 percent staffed. There is another sizable clinic similar that is going to open in Chesapeake, supposed to, on April 11th. If it does open on time, I am suspecting that it will be a similar thing. And you saw the announcements about more cuts coming in the VA.

You have talked a little bit about the need to be more integrated between DOD facilities and VA facilities, but then also on the civilian side, what is your vision for how we equip our civilian system to provide a surge capacity or backup capacity when we need it, to perform well in combat situations?

Please, Dr. Cannon.

Dr. CANNON. Senator, thank you for your very insightful comments and questions. I am a veteran. I get my care at our VA in Philadelphia. My wife is a primary care physician and takes care of veterans. So I can speak to your comments about the VA from that perspective.

I do have a role at Penn Medicine as the Assistant Dean for Veteran Affairs for Penn Medicine, but I am quite new in that role and still learning the ropes. So I will speak more from my end user experience.

I would say that certainly there are opportunities for synergy. The partnerships between VA facilities and academic medical centers I think have been partially realized, but in this sort of urgent situation we find ourselves in, we need truly a whole-of-society approach, and where there can be market synergy, where there can be economies of scale we should aggressively pursue that.

I know that our Chief Executive Officer (CEO), Kevin Mahoney, has made overtures to the VA, and there have been agreements signed between the VA. I do not have detailed knowledge about that and where that stands. But I think there is an opportunity, and we should push for that. And as a veteran who receives my care, I hope that we can continue to deliver excellent care through better synergy.

Senator KAINE. How about Dr. Friedrichs and Dr. Robb?

Dr. FRIEDRICHS. Thank you, Senator Kaine, and that is a beautiful facility. It will be tragic if it sits there empty while veterans are unable to access care because of shortages of medical professionals in the VA, in the DOD, and in the civilian sector.

We are in a less-than-zero-sum game right now, and that is both a health security issue but also a national security issue.

The first recommendation I would make to this Committee, direct that the Department of Defense does not close any more of our military training programs. For decades, the military training pro-

grams have been one of the pipelines that, when people eventually left the military, which all of us do, they go to the civilian sector. We cannot afford to close any more training programs when we have so many shortages of doctors and nurses and dentists and other things.

The second, I implore this Committee, in the NDAA, direct the DOD and in partnership with the appropriate VA oversight committees, the Veterans Administration, to come back with a plan, starting with the D.C. market, to integrate the two systems. We have talked about this since I was a Major. I moved here in 1997, and we were talking about this. It is time to stop talking and start doing it. We cannot afford to keep talking about this problem.

That hospital in the VA here is ancient. It has got to be replaced. We just finished a billion-dollar upgrade at Walter Reed. Why in the world are you not demanding that we come back with a plan to do that? It is more efficient, and it helps to pool the resources.

The third point, and the most important one in your Health Committee role, is we must address these pipelines as both a health security and an economic security and a national security concern. As long as the pipelines continue to be insufficient to need, there is no way that any of these problems are going to get fixed. And I think you have a unique opportunity to help bring that into both committees. Thank you, Senator.

Senator KAINE. Thank you. And Dr. Robb, I will ask that question for the record because I am now out of time. I yield back to the Chair.

Chairman WICKER. All right. Actually, these witnesses will not be taking questions for the record. I will let you followup for 45 seconds.

Senator KAINE. Dr. Robb, then could you approach that work-force integration question too? Thanks.

Dr. ROBB. Yes, and I will go back to where we can share resources, and I will foot-stomp. We have very many successful joint DOD and VA partnerships. Travis Air Force Base is a great example, where the actual VA is inside of David Grant Medical Center, share staffs, but more importantly, share patients. We have others where we are co-located community-based outpatient centers that feed patients into like Anchorage, Alaska. We see that down there at Naval Pensacola.

So those opportunities, because usually what happens is we want access to critical care patients for our proficiency, and the VA wants access to resources, which is either excess capacity on space or in staff. So I think that continued movement forward, not always one size fits all, but that is very, very important. Much like the VA is at all the academic health centers, I think the Department of Defense, especially six or eight strategic places, need to have strategic VA and strategic mil-civ partnerships, sharing staff.

And I will quickly say, not only does the military learn from the civilian opportunities, during Operation Iraqi Freedom (OIF) and Operation Endurance Freedom (OEF), actually, the American College of Surgeons made sure that they were with us so they could learn, firsthand, real-time, on how we were treating. So it is a mutually synergistic relationship.

Chairman WICKER. Thank you, Dr. Robb. Senator Rounds.

Senator ROUNDS. Thank you, Mr. Chairman, and I am going to follow right along that same line because I think what you are laying out is basic common sense when it comes to the integration of these two systems.

My question is, why is it that when we have what is considered to be excellent care with the military system, the MHS, involved, and then we have to transition these young men and women as they leave the armed service into a VA facility, in which we start all over again. And we have different ways of communicating, and, in fact, let me just ask this. In your experiences, how well do we integrate the transfer of information from the MHS back into the VA systems today?

Dr. CANNON. Senator, I can take a crack at that. I believe you are spot on. My experience in transitioning from the DOD to the VA was more of a lukewarm handoff than a warm handoff. I had to sort of navigate my way to the VA. I now have closed that gap and I get my care there, as I mentioned. But it is not a smooth process.

Why is it still the case that the two health care delivery systems are so partitioned? I think you have to go back to ancient history almost, in our country. And if you look at Secretary Gates' comment about his experience as Secretary of Defense, he said, "The one department that gave me the most fits was the Department of the VA."

So there are historic challenges. The VA wants to do it their way. Understandably, most of us do want to do it our way. But I think there are clear opportunities and a clear demand signal to break down those barriers and realize opportunities for synergy. So I think we can do that.

Senator ROUNDS. I think the focus should be on whether or not we are delivering for the veteran and not necessarily the survivability of the VA itself. And I think that sometimes gets mixed up.

I am just curious, gentlemen. We have talked about trauma centers. We have talked about the reintegration, or integrated health care system, and so forth. We are not, right now, at the same degree of activity and intensity with regard to battlefield casualties as we were just a few years ago, and therefore the opportunity for these surgeons, these battlefield surgeons and others, to actually learn right now is probably not as great.

How do we keep the intensity or the capabilities of the training, how do we keep that up to date when we do not have those opportunities? And I am not going to say that they are good opportunities. I am glad that we are not in them. But how do you allow that surgeon to keep those skills up to speed when you do not have the types of casualties that you have on a battlefield, that we were experiencing for a number of years?

Dr. FRIEDRICHS. Take care of sick patients, sir. I mean, there is an analog between taking care of a patient who has bladder cancer and needs to have their bladder removed and taking care of a patient who has just had a gunshot wound to the abdomen and needs to have their bladder reconstructed.

We need our military medics taking care of sick patients. They do that at hospitals that are well-staffed and well-resourced to take care of sick patients. And so that is what we have done historically

to maintain the proficiency of surgeons or of critical care nurses or of medical logistics staff, is keep them busy during peacetime taking care of sick patients. It is not a perfect analog, but that is the best surrogate, and that requires resourcing the system, making sure that sick patients can get in the door and get the care they need.

And to your point about the VA, I would just say I applaud the VA for accelerating moving forward with their electronic health record, because that is going to be the secret sauce that enables greater sharing between the two departments and will enable us to track patients from the day they join the military to the day they take their last breath, and really learn how to improve both systems.

Senator ROUNDS. Is the current system that you use integratable with the VA's new proposed medical records health care system?

Dr. FRIEDRICHS. I am not an expert on the VA's system. When I left the movie they were looking at purchasing the same system that the DOD had purchased. I hope that those with oversight responsibilities will insist that the two systems are integratable, because technologically, there is nothing to prevent that. I mean, civilian health care system integrate Epic and Cerner all the time, or McKesson and Epic. There should be no technological reason why we cannot do that.

Senator ROUNDS. Thank you. General Robb, anything to add to that?

Dr. ROBB. I would share what Dr. Friedrichs said. In fact, what I was excited about is I have had the opportunity for family members to be in civilian hospitals, and they are able to reach into it and see Genesis now. So they know the health care that my family members have been getting in the military.

I know that has absolutely been the vision between the Department of Defense and the Department of VA, and I believe that is still what I would call the true north.

Senator ROUNDS. Thank you. Thank you, Mr. Chairman.

Chairman WICKER. Thank you, Senator Rounds. Senator King.

Senator KING. Thank you, Mr. Chairman. First, I want to thank you for having this hearing. Very timely and important. Second, I want to associate myself with Senator Cotton's comments about sort of Berry Amendment for drugs. The idea that we have to buy Made in America shirts for our troops but we are worried about the availability of crucial drugs, that seems to me that is something that should be pursued. We could even call it the King-Cotton Amendment, but I will pass on that.

[Laughter.]

Also, Mr. Chairman, before getting into the questions, and these witnesses would not have the answers, but I think in light of this hearing, the Committee should make an inquiry about whether there have been firings or early retirements encouraged within the medical facilities at the Defense Department, because we know there is a lot of that going around, and I would like to know whether that is happening in the Defense Health Agency.

Second is the impact of the continuing resolution. That is certainly not going to help this situation in terms of maintaining demand signals, continuity, pilot programs—all of that is gone in a

continuing resolution. For the first time in my knowledge, I think the first time in American history, we are faced with a year-long continuing resolution, which basically vitiates the entire budget process.

Okay. What we are really talking about, it seems to me, is surge capacity. And it is impractical to maintain a capacity within the Defense Department, or even Defense plus VA, for the kind of casualties that would be generated in a significant conflict. Therefore, I see no other alternative than a cooperative surge agreement with the private sector. That is where capacity is, even though that is fairly limited.

Dr. Friedrichs, isn't that really what we are talking about here is how do we deal with a conflict way beyond what we are seeing now, within the current capacity? Defense Health Agency could not do it. VA could not do it. It has got to be relationships, and should we not have those relationships in advance so this is not something that we scramble to do, as we did during COVID, for example?

Dr. FRIEDRICHS. Senator King, I could not agree more strongly—

Senator KING.

[Inaudible.]

Dr. FRIEDRICHS. Thank you, sir. So in the cold war we had what was called the Integrated Continental United States (CONUS) Medical Operation Plan, which was essentially what you just described. It was our shared commitment, as a Nation, to care for our Nation's casualties, if and when our Nation went to war. That depended on the National Disaster Medical System as part of the integrating function between the Federal and the civilian health care system. The NDMS has been allowed to atrophy.

I echo the recommendations to reauthorize the Pandemic and All Hazards Preparedness Act, because that, in part, enables the NDMS. But I implore you to go further. The Integrated CONUS Medical Operation Plan needs to be updated, and we started that work when I was the Joint Staff Surgeon, and it is continuing today. Having the NDMS in name is not sufficient. We actually have to build out the numbers, by community, of what beds would be available—

Senator KING. With preexisting conditions and analysis of—

Dr. FRIEDRICHS. Yes.

Senator KING. I just wonder if the Pentagon has war-gamed this issue. They war-game everything else.

Dr. FRIEDRICHS. Absolutely, sir. We actually did a war game on this, that we hosted first when I was the Transportation Command Surgeon, and again when I was the Joint Staff Surgeon. And what we found was just as you said—it cannot be done unless it is a whole-of-the-nation effort. And the only way to get to that point is if we do much more detailed planning. Taking down funding for State and local readiness officials, for example, is not going to help them do more planning or preparing.

We need to work together to build and flesh out that plan, and we must bring industry into that. The defense industrial base provides equipment. The health industrial base addresses the points that you bring up.

Senator KING. And we have an analog in United States Transportation Command (TRANSCOM), which has agreements with the private sector both in terms of airplanes and ships, in the case of an emergency. That is where our surge capacity is.

So it seems to me, I mean, here we are talking about it, but I think there needs to be some very specific good, new looks at this relationship in order to be ready, so again we are not scrambling.

Dr. Robb, you are nodding. I take it you agree?

Dr. ROBB. Yes. I would absolutely concur. And again, I keep going back to the same theme, is we have got to buildup those 6 to 8 to 10 strategic Military Treatment Facilities, we have to resource them, and then you create the already established military-VA partnerships, and then you just keep expanding that ring. But you have to have those relationships codified and in place, and that is what Dr. Friedrichs is talking about. You cannot just, all of a sudden when it kicks off, pick up the phone and say, "How is it going?"

Senator KING. You have got to have them in place before the crisis hits.

Dr. ROBB. Absolutely.

Senator KING. Thank you, gentlemen. I appreciate it. Thank you, Mr. Chairman.

Chairman WICKER. Thank you very much, Senator King. Senator Budd. Catch your breath.

Senator BUDD. Thank you all for being here. Major General, in your opening statement, whether here or able to watch it on the closed circuit, you identified the importance of the relationship between the Military Health System and the defense logistics enterprise.

So should deterrence fail and war break out in the Indo-Pacific, there are undeniable logistics constraints, particularly given the geography of INDOPACOM. The logistics of replenishing medical supplies and evacuated wounded servicemembers could make all the difference in reducing servicemember casualties. You provide a number of recommendations in your opening statement to address these concerns, including a number of reports and studies, so thank you for that.

What can our Military Health System do in the short term, like immediately, to address logistical constraints, and how can DOD leverage medical innovation to address some of those constraints?

Dr. FRIEDRICHS. Thank you very much, Senator. I think the most immediate recommendation that I included in my written statement was that whenever we contemplate an operation or we are updating plans, we do a medical feasibility assessment, very similar to the logistics feasibility assessment that the Joint Staff J4 does. We need to ensure that we are informing our combatant commanders about what is and is not possible. That is something that can be done very easily.

The longer answer to your question gets back to the discussion that we were just having about partnering with industry, both on the equipment and pharmaceutical side and on the health care delivery side. We have the Civilian Reserve Air Fleet that allows us to commit money to ensure that we have industry partners willing to provide aircraft and support when we need it. We have no such

analog in the health care space, even though we know, as multiple Senators pointed out this morning, that there is insufficient capacity in the DOD and in the VA to care for our casualties.

The NDMS currently is a voluntary system in which hospitals can say, "Yes, okay," and then when we call them, they say, "I'm busy today. I'm not going to participate." We actually need to codify a system, as we have done with other industrial partners, in which there is a commitment and an understanding of how the reimbursement would work.

The last point that I would make on that going forward is in supplemental planning for future operations we have to build in that cost. There is no question, if we are bringing back thousands of casualties, as Colonel Cannon described, that that is going to displace care, and it is going to increase costs at hospitals. We have to plan for that. That is why this whole planning effort, the Integrated CONUS Medical Operations Plan, for which United States Northern Command (NORTHCOM) is the lead, in partnership with industry, State, local, and Department of Health and Human Services officials, is so important, so we can bring back the requirements for funding and the challenges that we will need congressional help to address.

Senator BUDD. Thank you. Following up on that, you said we need to codify that. Do you have the language ready, or has that been written in a way that we could review, either individually or as a Committee?

Dr. FRIEDRICHS. Senator, I took the liberty of including an attachment with suggested language, just in case anyone wanted to do that.

Senator BUDD. We will read it in a few moments. Thank you.

Mr. Robb, as you know, the Department relies on a mix of military personnel, federal civilians, and contractors to carry out its mission. Talk to me about the roles of physician extenders such as registered nurses, and what role do physician extenders play in ensuring the readiness of the broader force, and what challenges do you see to retention of physician extenders?

Dr. ROBB. Thank you for that question, Senator. I think it is key that the same issues of what I call proficiency and currency that exists for physicians, exists for our physician extenders. And the Army does a great job, especially in the way they have manned and equipped their fighting forces, of using those physician extenders, all the way down to the corpsmen, to the fullest extent of their capabilities.

And so I would argue, as we have these discussions about medical readiness and about our ability to care for what we call critical wartime specialties, we must remember, trauma is a small percentage of that, but the majority of the care that is applied to our fighting forces comes from our primary care providers, which would be Physician Assistants (PAs), nurse practitioners, general practitioners, family physicians. So we must ensure that they also have the critical thinking skills and the opportunity to practice at the top of their game.

Senator BUDD. Thank you all, to the whole panel. Chairman?

Chairman WICKER. Senator Budd, yes indeed, in looking at the statements, which have all been admitted to the record, by unani-

mous consent, I see on page 14 of Dr. Friedrichs' prepared testimony Attachment 1, Suggested National Defense Authorization Act Language. So we do appreciate him acting as an uncompensated legislative staffer for this Committee. We appreciate that. And thanks for the question.

Senator Kelly.

Senator KELLY. Thank you, Mr. Chairman. General Friedrichs, good morning, and thank you, all of you, for being here today. General Friedrichs, in a recent war game brief to Congress in November 2024, a hypothetical conflict in the Indo-Pacific resulted in 3,000 U.S. casualties in 3 weeks, and 10,000 across the entire conflict. And I am kind of following up on Senator Budd's line of questioning here.

These numbers are higher than anything we have seen since the Korean War. In a severely injured servicemember's transition through the care system and make their way back to the United States for treatment, I am concerned that the number of DOD providers capable of handling trauma will be grossly insufficient. So given that, we are going to need to surge capacity, potentially found in the U.S. hospital system and VA hospitals, meaning civilian hospitals, VA hospitals.

What concerns do you have with relying on U.S. civilian and VA hospitals to provide this trauma care to our servicemembers?

Dr. FRIEDRICHS. Thank you very much, Senator Kelly, and I would start by saying even before we get patients back to the United States, in the past we have relied on our allies and partners to help care for our casualties. And I am deeply concerned if we sever or degrade those relationships we will need to rewrite our plans, and the demands on the U.S. health care system will be even greater.

To your point about the U.S. health care system, the Integrated CONUS Medical Operation Plan that we updated in 1998, and then did not look at until 2020, is the plan that describes how we will surge capacity. But a key part of that gets back to some of the discussions we have had earlier. There have to be doctors and nurses and pharmacists and all the other staff to do that, and I implore that we continue to look at the pipelines that produce those medics as well as the facilities in which they work.

We had briefly chatted about the opportunity for a medical equivalent to the Civilian Reserve Air Fleet that we use to ensure access to civilian aircraft, when needed. I believe we need some similar construct in the health care system, where we partner with industry and recognized that during surge moments there is a plan, and there is money available, for us to be able to leverage their staff and their facilities.

Senator KELLY. Is there a plan?

Dr. FRIEDRICHS. There is a plan. We wrote the first version of that before I retired, and they are working on an update to that. But it would benefit from additional congressional oversight to ensure that it is on track and it does not get diverted by bureaucratic buffoonery.

Senator KELLY. Are there current efforts in the relationship building with these hospitals?

Dr. FRIEDRICH. The Defense Health Agency is tasked to have that outreach, and as I have met with hospital CEOs and system owners, there is certainly an opportunity to do more in that space. We must view the health care industry the same way we view the aviation industry or the missile-producing industry, as our partners. We cannot take care of America's casualties without those partners.

Senator KELLY. Can you talk to the value in the two Navy hospital ships—I do not know if anybody here is prepared to talk about it. Because I think there is an effort underway to replace those. There is also the training ships for the State maritime academies that I think also could serve a role. I visited one at the Philly Shipyard a few weeks ago, had an operating room on board. Is that part of the system, as you envision it?

Dr. FRIEDRICH. Yes, absolutely. The hospital ships are integral to our plans for a large-scale combat operation, and the two ships we have are some of the oldest ships afloat. They have to be replaced.

Senator KELLY. I think there is a plan to replace them now. Can you speak to how that is going, if you know?

Dr. FRIEDRICH. I pushed incredibly hard for that plan as the Joint Staff Surgeon, against intense opposition that we should spend the money in other places. I would defer to the Navy for the latest update on it, because they can give you the most current plan. But my understanding is that we are still years away from having the replacement ships available.

So we will have to extend the current ships, and I believe, the last update I received, which is dated, was through 2035. But we do need that additional replacement funding to replace those aged ships.

Senator KELLY. All right. Thank you, and thank you, Mr. Chairman.

Chairman WICKER. Thank you, Senator Kelly. Senator Warren.

Senator WARREN. Thank you, Mr. Chairman. So we need a medical health care system that works in wartime, but the one we have is failing us in peacetime. And I think we need to do better on this. Fixing TRICARE's prescription drug care benefit is part of that.

Since 2009, TRICARE has outsourced to Express Scripts a massive Pharmacy Benefit Manager (PBM). The Defense Health Agency, DHA, pays Express Scripts to negotiate with pharmacies, deciding where servicemembers can pick up their prescriptions and what price they are going to pay. But Express Scripts also owns Accredo, a massive pharmacy that participates in TRICARE, and DHA has been allowing all kinds of self-dealing between these two entities.

Here is one. DHA used to require Express Scripts to maintain a network of 50,000 pharmacies. But in 2021, Express Scripts negotiated that down to 35,000 pharmacies. Then they turned around and told thousands of pharmacies, that they do not own, either to take money-losing terms or get kicked out of TRICARE.

General Robb, you used to oversee the TRICARE network before this gaming started. Do you have any idea how many pharmacies have left, just since 2022?

Dr. ROBB. And Senator Warren, I have been out of this since 2016.

Senator WARREN. Okay. I just wondered if you happened to know how many had left. I will take a no.

Dr. ROBB. No, ma'am. No, ma'am, I do not.

Senator WARREN. Well, it is over 13,000 pharmacies have left this network, and most of them are independent pharmacies, community pharmacies. That has forced 400,000 servicemembers and their families to find new pharmacies, and many of them have been pushed to the Express Scripts-owned Accredo.

Even worse, Express Scripts has set up Accredo as the primary off-base pharmacy where military families can fill specialty drug prescriptions. You know, these are the really expensive cancer drugs, rheumatoid arthritis drugs, that make up over half of the \$8 billion in TRICARE prescription drug spending. So it is a lot of money here.

It does not end there. As we speak, Express Scripts is facing a whistleblower lawsuit that alleges the company systematically overfilled TRICARE prescriptions at Accredo, saddling DOD with, quote, "billions of dollars in excess dispensing fees and drug resupplies." And this is not a surprise. Express Scripts has been found to massively overfill and overpay for prescriptions at Accredo, which they own, in other government programs.

So General Robb, since last year, an audit uncovered that Express Scripts was leveraging its contract with the West Virginia Public Employees System to send inflated payments to Accredo for expensive specialty drugs, in some cases inflating the price by 100fold more than the cost of dispensing exactly the same drug at a competing pharmacy.

I imagine you think this kind of taxpayer overcharging is unacceptable. Is that fair, General Robb?

Dr. ROBB. I would agree with that, it would be unfair. Yes, ma'am.

Senator WARREN. Okay. DHA is supposed to audit Express Scripts' pharmacy data to make sure that that same thing is not happening at TRICARE, but DHA said it had not completed an audit because DHA had, quote, "no concerns about data accuracy."

You know, talk about being asleep at the wheel here, in just the first quarter of 2023, Express Scripts dispensed 70,000 specialty drug prescriptions at Accredo, but the company only reported about 40,000 to DHA. In other words, Accredo failed to report nearly half of the expensive specialty drugs dispensed at its own pharmacy, which were paid for by DHA. So they get the money, but they do not tell DHA what is going on here.

General Robb, after completing their investigation, the Government Accountability Office (GAO) sensibly recommended that DHA periodically audit Express Scripts' reported data for accuracy, which, by the way, is already required in the contract. So this is telling them basically to follow through on the contract.

Do you agree with GAO's recommendation?

Dr. ROBB. I would agree that they need to follow what is the business policy and what is the contractual requirements. Yes, ma'am.

Senator WARREN. All right. You know, I just want to say, and I will close up here, DHA is paying Express Scripts billions of taxpayer dollars to manage the TRICARE benefit and negotiate with

itself, and DHA is not even bothering to check the books. I think that everyone in this room agrees that Express Scripts ought to pass an audit, and that ought to be required in this year's NDAA.

Thank you, Mr. Chairman.

Chairman WICKER. Thank you, Senator Warren.

Dr. FRIEDRICH. Mr. Chairman, may I add a comment to that? Is there time?

Chairman WICKER. You certainly may, yes.

Dr. FRIEDRICH. Thank you very much. I would hold up the Veterans Health Administration's exemplary mail order program, which has worked for years, as an opportunity, again going back to this concept of how do we deliver better care, and where possible, do it more efficiently. There is a real opportunity for this Committee, in partnership with the appropriate oversight committees, to direct a comparison of the two systems and then bring back recommendations for the best practices between the two.

Pharmaceuticals are growing in costs, and that is not going to change. But this is an area in which the Veterans Health Administration actually has done this well for years, with high patient satisfaction, and more importantly, the patients get the meds they need, when they need them. There is a real opportunity to learn from the VA here.

Chairman WICKER. Thank you very much. Thank you, Senator Warren. Mr. Ranking Member, anything more?

Senator REED. Just let me commend the witnesses. You have given us lots to think about and lots to do, and so we appreciate that. Thank you very much.

Chairman WICKER. We are indebted to you and grateful to all three of you. Thank you very much.

This concludes the hearing.

[Whereupon, at 11:04 a.m., the Committee adjourned.]

