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REPORT OF THE TRANSGENDER MILITARY SERVICE COMMISSION

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Report of the Transgender Military Service Commission

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A nonpartisan national commission, comprised of medical and psychological experts, to consider whether Pentagon policies that exclude transgender service members are based on medically sound reasons.

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EXECUTIVE SUMMARY

- 1) This commission has been convened to determine whether US military policies that ban transgender service members are based on medically sound reasons. We find that there is no compelling medical rationale for banning transgender military service, and that eliminating the ban would advance a number of military interests, including enabling commanders to better care for their service members.
- 2) Medical regulations requiring the discharge of all transgender personnel are inconsistent with how the military regulates medical and psychological conditions, and arbitrary in that medical conditions related to transgender identity appear to be the only gender-related conditions requiring discharge irrespective of fitness for duty.
- 3) The American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders 5th ed. (DSM-5)* no longer classifies gender non-conformity as a mental illness. While military regulations are updated to reflect revisions of DSM for non-transgender-related conditions, regulations have not been amended to reflect scientific consensus about gender non-conformity.
- 4) The prohibition on medically necessary cross-sex hormone treatment is inconsistent with the fact that many non-transgender military personnel rely on prescribed medications, including anabolic steroids, even while deployed in combat zones, and is based on inaccurate understandings of the complexity, risks and efficacy of such treatments.
- 5) Regulations that prohibit transgender service members from obtaining medically necessary gender-confirming surgery are harmful to the service members and inconsistent with policy concerning other reconstructive surgeries that service members are allowed to have.
- 6) The ban on transgender military service compromises continuity of care between the Military Health Service and Veterans Health Administration, undermining an important goal that officials from both systems have endorsed.
- 7) Military regulations should be stripped of enlistment disqualifications for transgender conditions, whether defined physically or mentally, as well as retention provisions that specify gender identity disorder as grounds for administrative separation. Transgender personnel should be treated in accordance with established medical standards of care, as is done with all other medical conditions.
- 8) Senior leaders should rely on the experiences and standards of other militaries and US federal agencies in formulating administrative policy to address fitness testing, records and identification, uniforms, housing and privacy.

1) OVERVIEW

This Commission came together with the modest goal of assessing whether US military policies that ban transgender service members are based on medically sound rationales.¹ In the process of answering this question, we came to have a deeper appreciation for the consequences of these policies, and we were troubled by what we learned. We determined not only that there is no compelling medical reason for the ban, but also that the ban itself is an expensive, damaging and unfair barrier to health care access for the approximately 15,450 transgender personnel who serve currently in the active, Guard and reserve components.² Medical regulations requiring the discharge of transgender personnel are inconsistent with how the military regulates all other medical and psychological conditions, and transgender-related conditions appear to be the only gender-related conditions that require discharge irrespective of fitness for duty.

Medical standards for enlistment are generally designed to ensure that applicants are free of conditions that would interfere with duty performance, endanger oneself or others, or impose undue burdens for medical care. The regulations, however, bar the enlistment of transgender individuals regardless of ability to perform or degree of medical risk. Unlike other medical disqualifications, which are based on modern medical expertise and military experience, the transgender enlistment bar is based on standards that are decades out of date.

Medical standards for retention are generally designed to identify permanent medical conditions that cannot be corrected and are likely to affect, or have already affected, performance of duty. Existing regulations, however, give commanders complete discretion to separate transgender individuals without medical review (“for the convenience of the government”), regardless of ability to perform or degree of medical risk. As with the enlistment regulations, the retention regulations are inconsistent with modern medical understanding. They include transgender conditions on a list of disqualifying, maladaptive traits assumed to be resistant to treatment and inconsistent with either fitness for duty or good order and discipline. By regulation, service members are simultaneously barred from treatment and also presumed to be unfit, despite the lack of medical evidence to support the policy.

Research shows that depriving transgender service members of medically necessary health care poses significant obstacles to their well-being.³ According to one recent study, “Mental health, medical and substance abuse services obtained outside of the military are supposed to be communicated back to the military, so transgender people who seek these services elsewhere still risk exposure... This leads individuals to go without treatment, allowing symptoms to exacerbate, and causing some to treat symptoms with alcohol or drugs, which could lead to substance abuse or dependence.”⁴ Research has confirmed, as well, that policies that force individuals to conceal their identities can have significant mental health consequences.⁵

Transgender medical care should be managed in terms of the same standards that apply to all medical care, and there is no medical reason to presume transgender individuals are unfit for duty. Their medical care is no more specialized or difficult than other sophisticated medical care the military system routinely provides. Transgender service members should not be required to meet a higher standard of medical self-sufficiency than the military requires of anyone

else. Existing policies and practices are adequate for identifying rare and extreme circumstances that may affect duty performance.

Removal of the military's blanket ban on transgender service members would improve health outcomes, enable commanders to better care for their troops, and reflect the federal government's commitment to reducing disparities in health care access for transgender people. According to a 2013 resolution introduced by the United States and passed unanimously by delegates to the Pan American Health Organization, member states agree to "work to promote the delivery of health services to all people...taking into account the diversity of gender expression and gender identity" and to "give priority to promoting equal access to health services in national policies."⁶

In 2012, a federal appellate court affirmed that denying prisoners medically necessary health care for transgender-related conditions violates the 8th Amendment's prohibition against cruel treatment.⁷ While acknowledging significant differences that distinguish military and prison environments, when it comes to accessing health care, US service members' dependence on the Military Health System resembles prisoners' reliance on prison medical facilities. The ban on transgender military service should be eliminated, and the health care needs of transgender personnel should be addressed in the same way that medical needs of non-transgender personnel are managed.

2) DEMOGRAPHICS

The term *transgender* is a broad, umbrella term that refers to individuals who do not identify with the physical gender that they were assigned at birth. Being transgender does not mean that one has already transitioned to a different gender, or that such a transition will occur in the future. It means recognizing that the gender one has always had does not match the physical gender that was assigned at birth. The transgender community includes people who have already transitioned to the other gender, those who have not yet transitioned but who plan to do so, those who identify with the other gender but do not wish to transition, and others.⁸ Individuals assigned female at birth who identify as male are referred to as female-to-male (FTM), while individuals assigned male at birth who identify as female are referred to as male-to-female (MTF).⁹ There is no single medical treatment for transgender individuals who undergo gender transition. Surgical transition refers to the use of gender-confirming surgery to change one's gender, while medical transition refers to the use of surgery and/or cross-sex hormone treatment (CSH) to do so.

Social scientists estimate that there are 700,000 transgender American adults, representing .3 percent of the nation's adult population. In addition, Dr. Gary Gates and Dr. Jody Herman estimate that 15,450 transgender service members serve currently in the US armed forces, including 8,800 in the active component and 6,650 in the National Guard and reserve components, and that 134,350 veterans are transgender. Transgender adult citizens are more than twice as likely as non-transgender Americans (2.2 percent transgender vs .9 percent non-transgender) to serve currently in the military.¹⁰ Survey data suggest that approximately 90 percent of transgender service members are MTF transgender women.¹¹

Despite their service in the armed forces, little is known about transgender service members. Almost no scholarly research has been published on transgender military service, and the available body of literature includes just seven peer-reviewed and three non-peer-reviewed studies.¹² Of those ten studies, seven offer original empirical research, including five that include data on active-duty service members and veterans and two that focus exclusively on veterans.

3) REGULATIONS

3.a) Rationale for Regulations that Ban Transgender Service Members

Four themes characterize regulations banning transgender service members. In particular, the rules are (1) binding, in that there is no option or procedure for commanders or doctors to waive rules that disqualify transgender individuals for military service, either for accession or retention; (2) decentralized, in that they are articulated in different provisions of various Department of Defense Instructions; (3) unclear, in that regulatory terminology that references transgender identity is inconsistent; and (4) regulatory, not statutory. Because policies that prohibit transgender service are spelled out in Defense Department as well as service-specific regulations, but not in congressional statute, the Commander in Chief could change policy without obtaining congressional approval. That said, provisions of the Uniform Code of Military Justice that are not specific to transgender service members, such as conduct unbecoming, have been used as the basis for discharging these service members.

US military policies that ban transgender service members do not include rationales that explain why the armed forces prohibit them from serving, although the policies are embedded in comprehensive medical and other regulations that are designed, broadly speaking, to preserve health and good order. While regulations do not offer reasons for banning transgender service members, several transgender individuals have challenged the ban's lawfulness in court, and military representatives have presented rationales via testimony and affidavit. In *Doe v. Alexander* (1981), a federal district court noted "evidence that transsexuals would require medical maintenance to ensure their correct hormonal balances and continued psychological treatment and that the army would have to acquire the facilities and expertise to treat the endocrinological complications which may stem from the hormone therapy. The army might well conclude that those factors could cause plaintiff to lose excessive duty time and impair her ability to serve in all corners of the globe."¹³ In testimony for *Leyland v. Orr* (1987), an Air Force consulting physician testified that assigning individuals who had undergone a sex change operation to remote geographic areas, "would be equivalent to placing an individual with known coronary artery disease in a remote location without readily available coronary care."¹⁴

Finally, in *DeGroat v. Townsend* (2007), an Air Force consulting physician stated that,

The known and potential complications of sex change operations are many and varied and can affect the long term health and duty performance of the individual. Additionally, many of these patients are maintained on hormone therapy which independently has potential side effects. Further, individuals undergoing male to female gender conversions may encounter prostatic diseases which are more difficult to diagnose and to manage. Air Force duties require individuals from all

career fields to serve in a variety of locations around the globe, often changing assignments on short-term notice. Military medical providers in the field are not familiar with the problems these patients may encounter. Individuals who have undergone sex change procedures would not be qualified for world-wide service and if the Air Force assigned them even to remote domestic locations they would be without access to potentially acute specialized tertiary medical care, which would only be available at major medical centers. Overall, it is neither in the best interest of the individual patient to have their access to necessary health care limited during potential Air Force duties, nor is it in the best interest of the Air Force to have to provide the medical care that these individuals may require.¹⁵

Scholars have been unable to uncover any documentation on the history of the rules or the reasons why they were enacted. Hence, the trial records discussed above offer the only available official rationales for US military policies banning transgender service members.

3.b) Regulations Banning Transgender Service Members

Policies governing transgender service can be broken down into two categories: accession disqualifications and retention disqualifications.

Accession disqualification: Department of Defense Instruction (DODI) 6130.03 establishes medical standards for entry into military service.¹⁶ The purpose of the Instruction, as explained in an introductory section, is to ensure that individuals under consideration are free of contagious diseases that could endanger the health of other personnel, free of conditions or defects that may require excessive time lost from duty or that probably would result in separation, and medically capable of completing required training, adapting to military environments without geographic limitations, and performing duties without aggravating existing conditions.¹⁷

Enclosure 4 of DODI 6130.03 contains a list of disqualifying physical and mental conditions that preclude applicants from joining the military, and the list includes the following conditions, some of which are transgender-related: 14f. Female genitalia: History of major abnormalities or defects of the genitalia including but not limited to change of sex, hermaphroditism, pseudohermaphroditism, or pure gonadal dysgenesis... 15r. Male genitalia: History of major abnormalities or defects of the genitalia such as change of sex, hermaphroditism, pseudohermaphroditism, or pure gonadal dysgenesis... 25l. Endocrine and metabolic: Male hypogonadism... 29r. Learning, psychiatric and behavioral: Current or history of psychosexual conditions, including but not limited to transsexualism, exhibitionism, transvestism, voyeurism, and other paraphilias.¹⁸

Medical regulations generally allow for waivers of accession standards under some circumstances. Under DODI 6130.03, the services shall "Authorize the waiver of the standards [for entry] in individual cases for applicable reasons and ensure uniform waiver determinations."¹⁹ Service-specific implementing rules affirm the possibility of accession waivers. By Army rules, for example, "Examinees initially reported as medically unacceptable by reason of medical unfitness... may request a waiver of the medical fitness standards in accordance with the basic administrative directive governing the personnel action."²⁰

While accession standards allow for the possibility of waivers, they also specify that accession waivers will not be granted for conditions that would disqualify an individual for the possibility of retention: "Waivers for initial enlistment or appointment, including entrance and retention in officer procurement programs, will not be granted if the applicant does not meet the retention standards."²¹ As discussed below, because some conditions related to transgender identity are grounds for discharge, and because recruiters cannot waive a condition upon enlistment that would be disqualifying for retention, transgender individuals cannot obtain medical waivers for entrance into the military. In response to a 2013 Freedom of Information Act (FOIA) request, the Pentagon disclosed that between 2008 and 2012, three individuals had been denied entry into the military for transgender-related conditions. We are unaware of any instances in which transgender-related conditions have been waived for accession.

Retention disqualification: Medical standards that apply to the retention of individuals already in military service generally are more accommodating and flexible than accession standards, due to the investment that the military makes in training. DODI 1332.38 contains rules for retiring or separating service members because of physical disability, and includes an Enclosure 4 (similar to the Enclosure 4 of DODI 6130.03 discussed above) listing medical conditions and physical and psychiatric diagnoses that require referral for physical disability evaluation.²²

Not all medical conditions, however, are eligible for physical disability evaluation. Unlike regulations governing entry, regulations governing retention divide potentially disqualifying conditions into two tracks. Individuals with conditions deemed "physical disabilities" (Enclosure 4 conditions) are tracked into a medical system of physical disability evaluation, leading to a determination of fitness for duty or entitlement to benefits for medical separation or retirement. However, service members with conditions "not constituting a physical disability" (Enclosure 5 conditions) can be separated administratively from military service at a commander's discretion, without the same opportunity to demonstrate medical fitness for duty or eligibility for disability compensation. Enclosure 5 of DODI 1332.38 diverts service members out of the medicine-based physical disability system and into the commander-based system for administrative separation, and renders them ineligible for physical disability evaluation. Enclosure 5 lists more than twenty conditions and circumstances defined by the regulation as "not constituting a physical disability," including "Sexual Gender and Identity Disorders, including Sexual Dysfunctions and Paraphilias."²³

DODI 1332.14 controls administrative separations for enlisted persons (DODI 1332.30 controls for officers), and the policies behind administrative separation emphasize conduct and discipline, not medical fitness.²⁴ A service member may be separated for the convenience of the government and at the discretion of a commander for "other designated physical or mental conditions," a category defined to include "sexual gender and identity disorders."²⁵ However, the regulation contains no specific guidance for determining whether, or under what circumstances, "sexual gender and identity disorders" interfere with assignment or performance of duty. The regulation appears to conclude that any of the conditions listed in DODI 1332.38 Enclosure 5 automatically meet that standard, giving commanders unguided discretion to proceed. Unlike the regulation governing physical disability evaluation, DODI 1332.14 does not offer service members the

opportunity to concede that a condition exists and then to demonstrate that it does not affect their fitness for duty.

Commanders do not of course seek out every individual with an Enclosure 5 condition and discharge them, and whether a "convenience of the government" separation will be initiated, or not, is at the discretion of the commander. But when Enclosure 5 of DODI 1332.38 lists "sexual gender and identity disorders" as conditions that are inherently maladaptive in military service, that is a strong statement about disqualification, and there is no suggestion in any of the regulations that transgender-related conditions may under some circumstances be consistent with military service. To the contrary, the regulations suggest that separations for transgender-related conditions would always be appropriate.

Some commanders do appear to believe that they have the discretion to retain transgender service members in the same way that they may retain people with other Enclosure 5 conditions if they are performing well enough. But that is not a distinction written into the regulations. In response to a recent FOIA request for discharge data, a Pentagon spokesperson said that the military does not track the number of service members who have been separated for transgender-related reasons. We are aware, however, of approximately two dozen service members who have been discharged because of their transgender identity in recent years.

In addition to the accession and retention regulations discussed above, some aspects of transgender military service are governed by other rules. For example, transgender service members may violate orders for receiving undisclosed or prohibited medical treatment if they obtain health care from non-military doctors without receiving permission from commanders.²⁶

4) MEDICAL ASPECTS OF TRANSGENDER SERVICE

4.a) Mental Health

As discussed above, some regulatory provisions that prohibit transgender service emphasize psychological factors. In turn, scholars have found that some transgender service members report poor mental health. One recent study concluded that the transgender community faces, "elevated rates of suicide, risk for HIV infection, exposure to trauma, and other health challenges."²⁷ In a sample of 1,261 transgender respondents with prior military service, 40 percent had attempted suicide.²⁸ Among 70 veterans evaluated for gender identity disorder between 1987 and 2007, 4 percent "had actively harmed their genitals," 61 percent "revealed a history of serious suicidal thoughts," and 43 percent "had additional psychiatric diagnoses exclusive of [gender identity disorder]."²⁹

Despite such data, arguments based on mental health are not convincing rationales for prohibiting transgender military service, and DODI 6130.03 is not consistent with modern medical understanding.³⁰ Indeed, scientists have abandoned psychopathological understandings of transgender identity, and no longer classify gender non-conformity as a mental illness.

"Transsexualism" was eliminated as a diagnosis by the *DSM-IV* in 1994 and replaced by gender identity disorder. Yet *DSM-IV* did not classify gender identity disorder as a paraphilia. In the

newest edition of the *Diagnostic and Statistical Manual (DSM-5)*, gender identity disorder has been replaced with gender dysphoria, a diagnostic term that refers to an incongruence between a person's gender identity and the physical gender that they were assigned at birth, and to clinically significant distress that may follow from that incongruence.³¹ While gender identity disorder was pathologized as an all-encompassing mental illness, gender dysphoria is understood as a condition that is amenable to treatment.³² And, mental health professionals agree that not all transgender individuals suffer from dysphoria.

The World Health Organization's Working Group on the Classification of Sexual Disorders and Sexual Health (WGCSDSH) has recommended that the forthcoming version of the *International Statistical Classification of Diseases and Related Health Problems (ICD-11)*, due for publication in 2015, "abandon the psychopathological model of transgender people based on 1940's conceptualizations of sexual deviance."³³ According to a recent publication by WGCSDSH members, "once-prevailing views that reject the aim of supporting transition are no longer part of the mainstream of either psychiatric or general medical thought and practice...[and] the continued linkage of gender identity diagnoses with paraphilias and diagnoses of sexual dysfunction in the classification system appears to be both outdated and inappropriate."³⁴

The reclassification of transgender identity in both DSM and ICD is based, in part, on the understanding among scientists and medical practitioners that distress can be the result of prejudice and stigmatization, not mental illness, and that many individuals who do not identify with the physical gender that they were assigned at birth do not suffer from clinically significant distress, and therefore do not have a medical or psychological condition.³⁵ WGCSDSH members wrote recently that, "there are individuals who today present for gender reassignment who may be neither distressed nor impaired."³⁶ The high reported rates of distress among transgender veterans and service members have been based on clinical samples that over-represented patients requiring psychological care. And, a significant body of evidence shows that treatment can alleviate symptoms among those who do experience distress. A meta-analysis of more than 2,000 patients in 79 studies published between 1961 and 1991 found "Favorable effects of therapies that included both hormones and surgery...Most patients reported improved psychosocial outcomes, ranging between 87% for MTF patients and 97% for FTM patients."³⁷ Satisfaction rates have increased over time: "studies have been reporting a steady improvement in outcomes as the field becomes more advanced."³⁸

Defense Department rules concerning mental health, deployment and fitness for duty do not regulate gender identity in a manner that is consistent with the management of other psychological conditions, and have the effect of singling out transgender personnel for punishment even when they are mentally healthy. For example, DODI 6130.03 prohibits individuals suffering from serious mental illnesses such as autistic, schizophrenic and delusional disorders from enlisting in the armed forces. Yet for less serious disorders, regulations strike a careful balance between admitting those whose conditions can be managed without imposing undue burdens on commanders or doctors while excluding those whose conditions would impair their service. Thus, individuals with Attention Deficit Hyperactivity Disorder are prohibited from enlisting unless they meet five criteria including documenting that they maintained a 2.0 grade point average after the age of 14. Similarly, individuals with simple phobias are banned from

enlisting unless they meet three criteria including documenting that they have not required medication for the past 24 continuous months.

Retention regulations strike a balance as well. For those who develop mood or anxiety disorders while in the military, regulations require a referral for physical disability evaluation only if their condition requires extended or recurrent hospitalization or interferes with duty performance. And, service members requiring medication for mood and anxiety disorders are not categorically barred from deployment. The determination depends on the seriousness and stability of the condition, logistical difficulties in providing medication, and the need for clinical monitoring.

Finally, empirical data suggest that many non-transgender service members continue to serve despite psychological conditions that may not be as amenable to treatment as gender dysphoria. A 2012 meta-analysis of available scholarship estimated that 5.7 percent of active-duty service members who had never been deployed suffered from major depressive disorder, and that the prevalence rate among deployed service members was approximately 12 percent.³⁹ In 2009, at least 15,328 service members were hospitalized for mental health disorders, and the *Los Angeles Times* reported in 2012 that, “110,000 active-duty Army troops last year were taking prescribed antidepressants, narcotics, sedatives, antipsychotics and anti-anxiety drugs.”⁴⁰ According to the Congressional Research Service, “Between 2001 and 2011...[a] total of 936,283 servicemembers, or former servicemembers during their period of service, have been diagnosed with at least one mental disorder over this time period...Nearly 49% of these servicemembers were diagnosed with more than one mental disorder.”⁴¹ During manpower shortages, non-transgender individuals whose psychological well-being has not met entrance standards outlined in DODI 6130.03 have been able to obtain waivers allowing them to enlist in the military. According to the National Academy of Sciences, 1,468 of the 4,303 applicants (34 percent) who failed to meet psychiatric entrance standards from May 1, 2003, thru April 30, 2005, received waivers.⁴²

Despite its legitimate need to screen out individuals suffering from mental illnesses that would impair their service, the Defense Department allows those with manageable conditions to enlist and serve. For psychological conditions that fall short of schizophrenia, autism, and other serious illnesses, military regulations strike a thoughtful balance between these two goals. In contrast, Defense Department regulations that govern service by transgender personnel, who frequently do not suffer from distress, make no such distinction, banning all transgender individuals who seek entrance into the military and requiring the automatic discharge of all transgender personnel. And, military regulations conflate transgender identity with mental illness, even though APA and WHO have abandoned psychopathological models, and even though scientists have concluded that transgender and transsexual identity do not always entail distress and that treatments are effective for alleviating symptoms among those who do experience distress.

The British regulatory provision on mental health and transgender military service may warrant consideration at this point: “Although transsexual people generally may have an increased risk of suicide, depression and self-harm, transsexual applicants should not automatically be referred to a Service Psychiatrist. Transsexual applicants with no history of mental health problems or deliberate self-harm who meet other fitness standards should be passed as being fit to join the Armed Forces.”⁴³

4.b) Cross-Sex Hormone Treatment

Although regulations prohibit service members from intervening surgically to modify their genitals, they are not prohibited explicitly from obtaining cross-sex hormone treatment. That said, the use of hormones to modify primary or secondary sex characteristics would almost certainly constitute evidence of having a transgender identity, which is grounds for discharge.

Many, but not all, transgender people wish to take cross-sex hormones in order to achieve feminization or masculinization of their hair and fat distribution, genitalia, and musculature, and to achieve and maintain a gender presentation consistent with their gender identity. Hormonal therapy for male-to-female (MTF) reassignment involves medications that block the production and effects of testosterone (anti-androgen therapy) and simultaneously produce feminizing effects (estrogen therapy). Several classes of medications decrease testosterone level. Spironolactone is generally safe and inexpensive and is most commonly used. Most primary care providers are familiar with its use, as it is commonly prescribed for other conditions. Spironolactone decreases libido, prostate size, erections and the growth of hair on the face and body, and causes some breast growth.

Estrogens that augment breast size and redistribute body fat are the main medications that promote feminization. Generally, feminizing effects are first noticeable in three to six months with an expected maximum effect after two to three years of treatment. That said, the degree and timing of the changes can differ from person to person. For female-to-male (FTM) patients, the main treatment for hormonal reassignment is testosterone, which can be administered through patches, gels, or injection and which usually produces satisfactory results. Masculinizing hormone therapy tends to lower the voice, produce body and facial hair, enhance upper body musculature and strength, and it also ends menses. Most effects take place beginning at eight weeks and maximize at about two years and vary depending on age and genetic make-up.

Cross-sex hormone administration is currently an off-label use of both estrogens and androgens, and entails some degree of risk, dependent on the type of medication, dose, route of administration, and patient's age, health, family history and health habits.⁴⁴ Feminizing hormones are associated with increased risk of weight gain, hypertriglyceridemia, gallstones and elevated liver enzymes. Oral estrogen may increase risk for venous thromboembolic disease and Type 2 diabetes, though this effect is attenuated for transdermal estrogen. The most serious risks of masculinizing hormones are weight gain, acne, sleep apnea, balding, and polycythemia (increased production of red blood cells).⁴⁵ For these reasons, laboratory monitoring is recommended before starting any hormone regimen. Clinical monitoring for effect is not complicated, and involves simple clinical exams and assessments of patient satisfaction. With appropriate training and/or access to expert consultation, independent duty corpsmen, physician assistants, and nurses can supervise hormone treatment initiated by a physician.

Despite the risks associated with hormone replacement, over 50 years of clinical experience have demonstrated that hormones are an effective treatment for gender dysphoria, that psychological benefits follow from cross-sex hormone administration, and that the incidence of complications is quite low.⁴⁶ Studies looking at the risk of blood clots from estrogen found an occurrence of anywhere from 0 to 142 blood clots per 10,000 people per year, with much lower rates in more

recent studies with newer estrogens and non-oral administration.⁴⁷ Clinics with a high volume of transgender patients on estrogen therapy report having “rarely seen adverse effects.”⁴⁸

While the use of hormones may entail some risk, the military consistently retains non-transgender men and women who have conditions that may require hormone replacement. For example, gynecological conditions listed in DODI 1332.38 Enclosure 4 (dysmenorrhea, endometriosis, menopausal syndrome, chronic pelvic pain, hysterectomy, or oophorectomy) require referral for evaluation only when they affect duty performance. And, the only male genitourinary conditions that require referral for evaluation involve renal or voiding dysfunctions. The need for cross-sex hormone treatment is not listed as a reason for referral for either men or women. The military also allows enlistment in some cases despite a need for hormone replacement. DODI 6130.03, for example, does not disqualify all female applicants with hormonal imbalance. Polycystic ovarian syndrome is not disqualifying unless it causes metabolic complications of diabetes, obesity, hypertension, or hypercholesterolemia. Virilizing effects, which can be treated by hormone replacement, are expressly not disqualifying.

Hormonal conditions whose remedies are biologically similar to cross-sex hormone treatment are grounds neither for discharge nor even for referral for medical evaluation if service members develop them once they join the armed forces. Male hypogonadism, for example, is a disqualifying condition for enlistment, but does not require referral for medical evaluation if a service member develops it after enlisting. Similarly, DODI 6130.03 lists “current or history of pituitary dysfunction” and various disorders of menstruation as disqualifying enlistment conditions, but personnel who develop these conditions once in service are not necessarily referred for evaluation. Conditions directly related to gender dysphoria are the only gender-related conditions that carry over from enlistment disqualification and continue to disqualify members during military service, and gender dysphoria appears to be the only gender-related condition of any kind that requires discharge irrespective of ability to perform duty.

Military policy allows service members to take a range of medications, including hormones, while deployed in combat settings. According to a comprehensive Defense Department study, 1.4 percent of all US service members (approximately 31,700 service members) reported prescription anabolic steroid use during the previous year, of whom 55.1% (approximately 17,500 service members) said that they obtained the medications from a military treatment facility. One percent of US service members exposed to high levels of combat reported using anabolic steroids during a deployment.⁴⁹ According to Defense Department deployment policy, “There are few medications that are inherently disqualifying for deployment.”⁵⁰ And, Army deployment policy requires that, “A minimum of a 180-day supply of medications for chronic conditions will be dispensed to all deploying Soldiers.” A former primary behavioral health officer for brigade combat teams in Iraq and Afghanistan told *Army Times* that “Any soldier can deploy on anything.”⁵¹ Although Tricare officials claimed not to have estimates of the amounts and types of medications distributed to combat personnel, Tricare data indicated that in 2008, “About 89,000 antipsychotic pills and 578,000 anti-convulsants [were] being issued to troops heading overseas.”⁵² The Military Health Service maintains a sophisticated and effective system for distributing prescription medications to deployed service members worldwide.⁵³

Our nearest allies, Canada, the United Kingdom and Australia, have determined that the risk of deploying transgender service members on cross-sex hormone treatment is low, and post-

transition individuals from Canada and the United Kingdom have completed tours in Afghanistan. The US has deployed a post-operative transgender member of the Military Sealift Command repeatedly on Navy ships.⁵⁴

4.c) Gender-Confirming Surgery

The consensus of the medical profession, as reflected in official policies of the American Medical Association, American Psychological Association and Endocrine Society, is that gender-confirming surgeries can be medically necessary for some transgender individuals to mitigate distress associated with gender dysphoria. Surgeries include chest reconstruction and surgeries to create testes (scrotoplasty) and penises (phalloplasty or metoidioplasty, with or without urethral lengthening) for FTM's, and facial feminization, breast augmentation and surgeries to remove testes (orchietomy) and create vaginas (vaginoplasty) for MTF's. That said, other transgender individuals do not want or require surgery to alleviate symptoms. A recent study noted that, "As the field matured, health professionals recognized that while many individuals need both hormone therapy and surgery to alleviate their gender dysphoria, others need only one of these treatment options and some need neither. Often with the help of psychotherapy, some individuals integrate their trans- or cross-gender feelings into the gender role they were assigned at birth and do not feel the need to feminize or masculinize their body. For others, changes in gender role and expression are sufficient to alleviate gender dysphoria. Some patients may need hormones, a possible change in gender role, but not surgery; others may need a change in gender role along with surgery but not hormones."⁵⁵

In considering the question of gender-confirming surgery among military personnel, it is important to recognize that regulations permit service members to have elective cosmetic surgeries at military medical facilities, and that some of those elective procedures risk post-operative complications that can be more serious than those of medically necessary gender-confirming surgeries.⁵⁶ For example, the LeFort osteotomy procedures and mandibular osteotomies that service members may elect to have are associated with a number of possible complications based upon the technique, surgical level, and anatomic site at which the surgery/osteotomies are performed.⁵⁷ The incidence of complications in craniofacial surgery depends upon the type of surgery and anatomic location at which the procedure is performed, and infection rates may range from approximately 1 to 3 percent.⁵⁸ Additional complications following mandibular osteotomies, such as sensory deficit, may range between 24 to 85 percent, and unfavorable fractures associated with sagittal split osteotomies may range between 3 to 23 percent.⁵⁹ Other studies cite complication rates of LeFort I osteotomies at 6.4 percent, including anatomic complications, bleeding requiring transfusion, infection, ischemic complications such as aseptic necrosis, and insufficient fixation.⁶⁰ Treatment for these complications may require additional surgical or other interventional procedures, antibiotics, and/or local wound care.

Even if the Military Health Service provided gender-confirming surgeries, however, the demand for such procedures would be low. Research on civilian employers whose insurance plans cover transition-related health care has found that very few employees submit claims for such benefits in any given year. If extrapolated to the active, Guard and reserve components of the military, the data suggest that if transgender service members were allowed to serve, and if the military covered medically necessary care related to gender transition, fewer than 2 percent of transgender service members, a total of 230 individuals, would seek gender-confirming surgery

in any particular year.⁶¹ A recent study reported the average cost of transition-related health care at \$29,929.⁶²

As with any surgical procedures, gender-confirming surgeries entail a risk of short-term and chronic post-operative complications.⁶³ Gender-confirming procedures that pertain to the breasts and chest tend to entail low complication rates. MTFs who undergo breast augmentation as a single surgery often are discharged the same day with pain medication and antibiotics. They leave their dressings intact for three days following surgery and the steri-strips along the points of incision are left in place for another week. Patients are generally comfortable within two days and return to regular activities within two weeks, though doctors recommend that they avoid exerting themselves for a month. Surgeries involving the genitourinary system can be riskier. For MTF individuals, surgery on the external genitalia typically entails a penectomy, bilateral orchiectomy, vaginoplasty (including formation of the labia major and minora), clitoroplasty, and urethral shortening. For vaginoplasty, patients are hospitalized for six to eight days. MTFs who have this surgery will start to feel more comfortable after one to two weeks and will be asked to return to the clinic for periodic follow-up visits, though strenuous activity typically is avoided for three months.

Despite the possibility of post-operative complications, research shows that their incidence rate is low. Across 15 studies from 1986 to 2001, 2.1 percent of patients had rectal-vaginal fistula, 6.2 percent with vaginal stenosis, 5.3 percent had urethral stenosis, 1.9 percent with clitoral necrosis, and 2.7 percent with vaginal prolapse.⁶⁴ A follow-up study of 80 women who had vaginoplasties found three post-operative complications and another determined that among 89 vaginoplasties, there was one major complication.⁶⁵ If transgender service members were allowed to serve and to have gender-confirming surgery while in the military, we estimate that ongoing post-operative complications would render ten MTF service members unfit for duty each year.⁶⁶

For FTM individuals, surgery on the genitalia can include a vaginectomy, either metoidioplasty (clitoral lengthening with or without urethral lengthening) or phalloplasty (either pedicled flap or free tissue transfer, with or without urethral lengthening), and scrotoplasty (with placement of testicular prostheses). Additionally, some individuals undergo hysterectomy and bilateral salpingo-oophorectomy. Phalloplasty is a lengthy multiple stage process, and a majority of FTM patients do not undergo any genital surgery except for a hysterectomy and the removal of the fallopian tubes and ovaries. For FTMs who desire both top (chest) and bottom (genital) surgeries, the timeline is more complex than for MTFs. The chest surgery can be completed at the same time as a hysterectomy and oophorectomy, and in most cases patients are discharged the following day. After a mastectomy, FTMs are back to their normal routines in one to two weeks but should avoid strenuous activity for four weeks. FTMs who have had a hysterectomy or oophorectomy can be required to wait four to six months until they can undergo additional genital surgeries, though hysterectomy and oophorectomy may be performed simultaneously with genital reconstruction. Those having urethral lengthening are generally hospitalized five to ten days. Phalloplasty is more complicated, and the expected hospital time can be ten to fourteen days, with a catheter required for up to three weeks.⁶⁷

Research suggests that a minority of individuals having female-to-male genital surgery may expect long-term complications that would require ongoing care.⁶⁸ In a study of 56 FTM patients

in France who had a phalloplasty, 25 percent had complications including infection and hematoma. In the same study, 29 percent of those with a penile prosthesis had mechanical or infective complications.⁶⁹ In another study in the UK of 115 FTMs who underwent total phallic reconstruction from 1998 to 2008, 10.4 percent experienced partial skin necrosis, 4.3 percent had infection, and 2.6 percent had phalluses that were lost.⁷⁰ That said, very few FTMs have genital surgery, and out of 1,594 FTMs who responded to a recent survey, only 48 individuals (3 percent) had genital surgery, including 24 who had metoidioplasty and phalloplasty, 1 who had just phalloplasty, and 23 who had just metoidioplasty.⁷¹ Given such low demand, even using conservative assumptions it is estimated that only 6 post-operative FTM transgender men would become unfit for duty each year as a result of ongoing, post-operative complications following genital surgery.⁷²

In sum, while the risks of genital surgery are real, they are no higher than risks associated with other genitourinary procedures, and they are lower than risks that accompany some elective non-transgender-related surgeries which the military allows and which, unlike genital surgeries for transgender individuals, are cosmetic and not medically necessary. As well, the low rate of demand for genital surgeries would mean that in absolute and relative terms, allowing such procedures would place almost no burden on the military.

4.d) Deployment

In explaining the military's ban on transgender service, and as noted above, spokespersons have emphasized non-deployability, medical readiness and constraints on fitness for duty as reasons why transgender service members should not be allowed to serve. While personnel policy must of course be designed to promote deployability and medical readiness, arguments invoked to oppose transgender service on these grounds do not withstand scrutiny. With few exceptions, transgender service members are deployable and medically ready. As noted in other sections of this report, cross-sex hormone treatment and mental health considerations do not, in general, impede the deployability of transgender service members, and the public record includes instances in which transgender individuals deployed after having undergone transition.⁷³ With two exceptions, all transgender service members who are otherwise fit would be as deployable as their non-transgender peers. The first exception is post-operative transgender service members whose genital surgeries result in long-term complications. Using conservative assumptions, as noted earlier, an estimated 16 post-operative service members (ten MTF transgender women and six FTM transgender men) would become permanently undeployable each year as a result of ongoing post-operative medical complications following genital surgery.

The second exception would be those undergoing surgical transition while in service. But the number of service members undergoing surgical transition in any given period would be low, both in relative and absolute terms, either because they would have already transitioned prior to joining the military, would prefer to wait until the end of military service to transition, or would not want to surgically transition, regardless of the timing. As discussed above, if the military's health care program paid for transition-related coverage, fewer than 2 percent of transgender service members, a total of 230 individuals, would seek gender-confirming surgery each year. With very few exceptions, transgender service members would be deployable and medically ready on a continuous basis.

Straightforward and fair-minded regulatory options are available for managing transgender military service and deployability. According to Army regulations, which, as explained above, do not apply to transgender-related conditions, “Personnel who have existing medical conditions may deploy” if deployment is unlikely to aggravate the condition, if an unexpected worsening of the condition would not pose a grave threat, if health care and medications are immediately available in theater, and if “no need for significant duty limitation is imposed by the medical condition.”⁷⁴ British military policy concerning transgender service and deployability is equally sensible: “Applicants who are about to undergo, or are still recovering from surgery to change the external appearance of their body into that of the acquired gender should be graded P8 [medically unfit], as with any other condition that is being treated or requires surgery at the time of application, until they are fully recovered from the surgery.”⁷⁵

Many non-transgender service members are temporarily or permanently non-deployable, but they are not automatically discharged as a result, and military policies accommodate them within reason. Defense Department regulations confirm that when evaluating a service member’s fitness for duty, non-deployability is not grounds for a determination of unfitness: “Inability to perform the duties of his or her office, grade, rank, or rating in every geographic location and under every conceivable circumstance will not be the sole basis for a finding of unfitness.”⁷⁶ Even service members who are permanently constrained by serious medical conditions and defects are allowed, under some circumstances, to remain in the military. According to DODI 1332.38, “A service member who has one or more of the listed conditions or physical defects is not automatically unfit,” including systemic diseases such as tuberculosis, leprosy, lymphoma, leukemia, or Hodgkin’s disease.⁷⁷ Regulations provide service members suffering from these and other serious, non-transgender-related, medical conditions with opportunities to serve in a limited capacity and to recover: “A member previously determined unfit and continued in a permanent limited duty status...may be determined fit when the member’s condition has healed or improved so that the member would be capable of performing his or her duties in other than a limited duty status.”⁷⁸

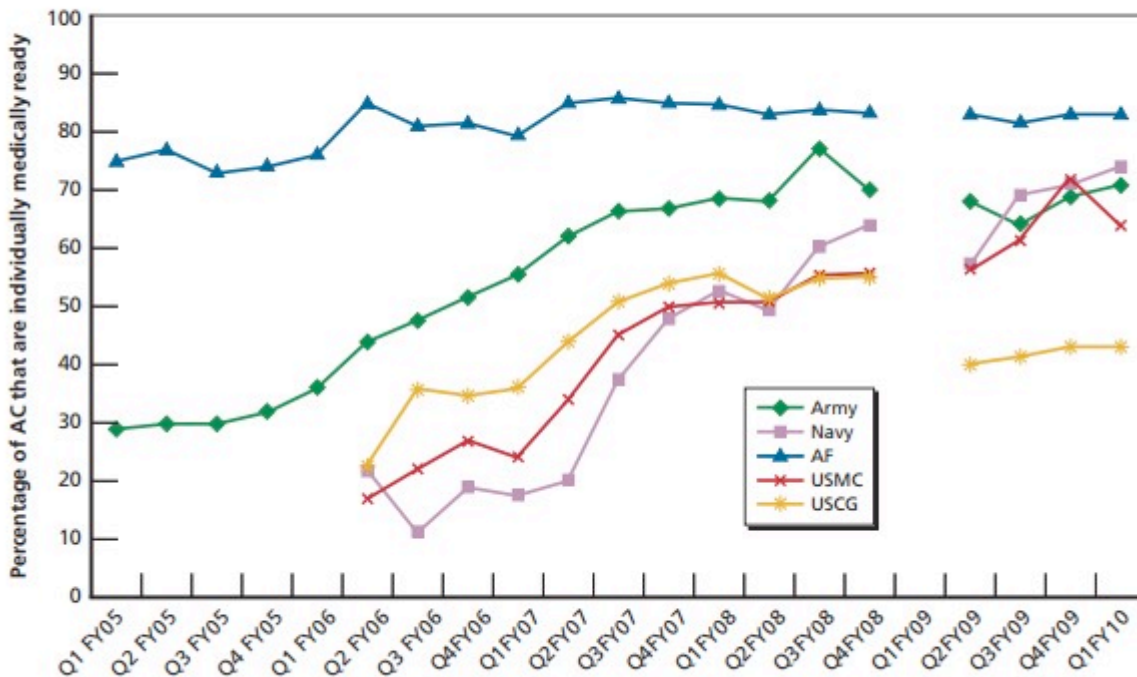
Although deployability is a crucial component of readiness, many non-transgender service members are temporarily or permanently non-deployable. According to a 2011 Defense Department study of health-related behaviors, 16.6 percent of active duty service members (244,000 service members) were unable to deploy during the twelve-month period prior to the survey’s administration, including 22.5 percent of Marines. Service members who were temporarily or permanently non-deployable cited a variety of factors including injuries (31.5 percent), illness or medical problems (23.4 percent), pregnancy (9.9 percent), mental health (8.1 percent), family reasons (3.3 percent) and other unspecified reasons (29.9 percent). Another 2.2 percent of the active component returned early from a deployment during the previous year.⁷⁹

Yet non-transgender, non-deployable service members are not automatically banned, and policies accommodate them to the extent possible. Indeed, the services have adopted leave and assignment policies that provide for prolonged absences and restrictions on duty as a result of medical conditions, as well as life choices that service members make. These include ordinary and advance leave. By law, members of the armed forces are entitled to 30 days of paid leave per year (generally referred to as “ordinary” or “annual” leave), accruing at a rate of 2½ days per month.⁸⁰ Service members need not provide any justification in order to take their annual leave. On the contrary, military commanders “shall encourage and assist all Service members to use” their

leave.⁸¹ Leave is scheduled “consistent with operational requirements, training workloads, and the desires of the Service member,” including “at least one extended leave period each year of approximately 14 consecutive days in length or longer.”⁸²

Service members are permitted to accumulate up to 60 days of ordinary leave under normal circumstances, and may accrue up to 120 days when deployed to certain areas or performing duties designated by the Secretary of Defense.⁸³ They may also be extended up to 30 days of “advance leave” after their ordinary leave has been used up.⁸⁴ While the operational needs of the service are critical considerations, existing military law and policy contemplate that members may be absent from duty for extended periods of time. On average, service members are expected to be absent one month out of every twelve, and military regulations provide for absences of up to 90 days per year without regard to medical needs or other special considerations.

Figure 2: Individual Military Readiness Rates, Active Component, 2005-2010



From *Medical Readiness of the Reserve Component*, Rand Corporation, 2012

Service members may also be granted special leave on top of their ordinary leave. This leave is in addition to the 30 days per year provided for by federal law and is not counted against the member’s ordinary leave balance. Some special leave, like the 60 days allowed on graduation from service academies such as West Point, is clearly not meant to be used more than once.⁸⁵ Other special leave, however, can be used multiple times. For example: the armed forces give special leave to personnel who have children while on active duty. New mothers can take up to 42 days of maternity leave after delivery, and a service member whose spouse gives birth can take 10 days of parental leave (formerly called “paternity leave”).⁸⁶ Adoptive parents are granted 21 days of special leave, which can be taken any time up to one year after the adoption is

complete.⁸⁷ The regulations do not restrict the number of times such leave can be taken. Mothers of newborn children and single parents who adopt also receive a 120-day deferment from assignments overseas where dependents are not authorized to travel typically, imminent danger or hostile fire areas.⁸⁸ Service members can elect to waive the deferment, but are not required to do so.⁸⁹

In addition to the elective leave programs, the services provide for situations in which a member may be absent owing to a medical condition or procedure. A member unable to be present for duty due to hospitalization is excused from duty while hospitalized. The absence is not counted against the member's leave balance. Members recovering from medical procedures or illnesses can also be granted convalescent leave of up to 30 days, as directed by their unit commander or by the commander of their military hospital; this leave is likewise not charged against their ordinary leave.⁹⁰ Longer periods of convalescence may be authorized under procedures determined by each service. In the Army, for example, any period of convalescent leave exceeding 30 days requires approval by the local military hospital commander.⁹¹

Military convalescent leave policy does not discriminate against elective procedures such as Botox treatments and "plastic surgery for unacceptable cosmetic appearance."⁹² Soldiers receiving such procedures may be expected to reimburse the service for their cost, but they "will be afforded convalescent leave and will not be required to use regular leave for their post-operative recovery."⁹³ Finally, the services recognize that members may on occasion have medical conditions which limit their availability to be assigned overseas. Members with such medical conditions may be deferred from reassignment for up to 12 months.⁹⁴ Personnel with more persistent medical needs are given assignment limitation codes and may be excluded from overseas service altogether, while still remaining on active duty.⁹⁵

The concerns of the judge in the *Alexander* case notwithstanding, existing military policies and procedures are designed to ensure a capable fighting force while at the same time anticipating and providing for prolonged absences by service members based on medical conditions, elective medical procedures, personal life choices, and morale and personal welfare. Transgender service members, however, are automatically discharged, in part because of assumed constraints on their deployability and medical readiness, even though such constraints would apply to no more than a few hundred transgender service members at any one time. In contrast, non-transgender service members are given multiple opportunities to demonstrate their deployability and fitness for duty despite medical limitations, and many are retained even if they are not fully deployable or fit. Even those service members deemed permanently unfit "may be retained as an exception to the general policy rule" if their skills or experience warrant continuing service.⁹⁶

4.e) Adaptability and Continuity of Care

While some experts have cited difficulties associated with the acquisition of competence as an argument against transgender military service, acquiring the skills necessary for providing transgender-related health care would advance military interests in a number of ways.⁹⁷ MHS's acquisition of competence would enhance the well-being of the estimated 15,450 transgender service members who serve currently. Medical research has demonstrated that "hormone therapy and surgery have been found to be medically necessary to alleviate gender dysphoria in many

people,” and that treatment is effective in promoting the emotional and physical well-being of transgender individuals.⁹⁸

MHS’s acquisition of competence in the provision of transgender-related health care would promote continuity of care between the MHS and the Veterans Health Administration (VHA). Military as well as VHA officials have acknowledged the importance of continuity of care as a cost-saving measure and because continuity improves health-related outcomes.⁹⁹ And officials representing both medical systems have expressed their commitment to promoting continuity for service members transitioning from the armed forces to veteran status.¹⁰⁰ The regulatory requirement for the VHA to provide all transgender-related health care (aside from gender-confirming surgery) and for the military to deny it undermines continuity of care and imposes unnecessary costs on the VHA. For example, a service member whose depression could have been avoided through the provision of proper care during active service may require, upon separation from the military, significantly more interventions from VHA clinicians than would have been the case if MHS had provided appropriate and timely care.

The VHA, the largest health care system in the country, has provided all transgender-related health care except for gender-confirming surgery since the June, 2011, promulgation of VHA Directive 2011-024, “Providing Health Care for Transgender and Intersex Veterans.” Since that time, VHA has disseminated its new treatment standard via internal mechanisms such as an intranet SharePoint site, and VHA’s Transgender Education Workgroup has produced webinar trainings about cultural competence, mental health and cross-sex hormone treatment. VHA’s Pharmacy Benefits Management Office has collaborated with LGBT Program Coordinators and experts in the Office of Health Equity to develop hormone treatment guidelines which have been distributed widely throughout the system. Permanent, recurring LGBT psychology fellowships have been established at nine VA facilities, and VHA has established four Transgender E-Consultation teams to support health care providers throughout the system. Medical systems of foreign militaries have adapted to the decision to provide transgender-related health care as well. It is clear that MHS will adapt and acquire the competence the VHA has worked to build when the ban on transgender military service is lifted.

MHS has demonstrated repeatedly that it is able to institute rapid, service-wide changes in policy and procedures when faced with new diseases, operational contingencies, legislative mandates, and economic and/or political requirements. For example, the management of battlefield injuries illustrates MHS’s ability to respond to changing external realities, in this case the evolving face of wartime trauma. The Iraq and Afghanistan theaters of operation produced a large number of casualties that were managed with the most modern advancements in diagnosis, transportation and treatment. Lessons learned in all three phases were rapidly transmitted service-wide, permitting bottom-up recommendations for policy changes at the highest levels of MHS and resulting in unprecedented success in reducing morbidity and mortality. Telemedicine expertise at Landstuhl Regional Medicine Center in Germany (usually the first tertiary medical facility to receive battlefield injuries from Iraq or Afghanistan) established a system that “allow[ed] (1) rapid dissemination of lessons learned, (2) establishment of process and problem ownership, (3) rapid dissemination of policy change recommendations, (4) improved medical/surgical management efficiencies, and (5) state-of-the-art innovations in overall trauma care and

development of standardized trauma clinical practice guidelines and protocols to facilitate reductions in mortality and morbidity rates in this unique trauma population.”¹⁰¹

Other examples of significant changes in MHS policies and protocols include: physical profiling of active duty members by measuring fitness capabilities;¹⁰² development of quality assurance programs in the delivery of health care;¹⁰³ development of executive skills required for management of major military treatment facilities;¹⁰⁴ development and evolution of dependent medical care;¹⁰⁵ changing weight standards for active duty personnel;¹⁰⁶ and, of course, the requisite changes following the repeal of “don’t ask, don’t tell.”¹⁰⁷

5) POLICY RECOMMENDATIONS

The regulatory revisions that this commission recommends are simple, straightforward and fair. They improve care for US service members without burdening the military’s pursuit of its vital missions.

Recommendation #1: Lift the ban on transgender military service. With respect to medical regulations, the Commander in Chief should order the Defense Department to eliminate bars to transgender military service by updating enlistment regulations that disqualify conditions that are defined physically (“abnormalities or defects of the genitalia such as change of sex”) and mentally (“psychosexual conditions, including but not limited to transsexualism”). These blanket enlistment bars should be deleted, along with other disqualifications that may arise from medically appropriate treatment of transgender-related conditions, such as amenorrhea or hypogonadism.¹⁰⁸ The Commander in Chief should order the Defense Department to eliminate retention regulations that specify gender identity disorder as a condition justifying administrative separation as well.¹⁰⁹

Recommendation #2: Do not write new medical regulations. Aside from these minor revisions, the Defense Department should not write new medical regulations or policies to address health care needs of transgender personnel, and should treat transgender service members in accordance with established medical practices and standards, as it does with the provision of all medical care. As we have documented throughout this report, transgender service members should be presumed to be fit. Any medical issue that interferes with an individual’s performance of duty is already subject to evaluation under existing medical standards, which are sufficient for enabling doctors to make determinations of fitness and deployability for transgender personnel. Transgender service members should not be held to different standards of self-sufficiency or fitness than any other service members.

Recommendation #3: Base new administrative guidance on foreign military and US government precedents. While no new medical rules are needed, the Defense Department should formulate administrative guidance to address fitness testing, records and identification, uniforms, housing and privacy. We encourage independent scholars as well as Pentagon analysts to study foreign military experiences that could inform the policy-making process. At least 12 countries including Australia, Belgium, Canada, the Czech Republic, Denmark, Israel, the Netherlands, New Zealand, Norway, Spain, Sweden, and the United Kingdom allow transgender personnel to serve; foreign military regulations that apply to transgender military service are straightforward and sensible, offering a sound model for US military policy.

Appendix – Statement by 16 current and former military university faculty members

We write to endorse the quality of research that informs the Report of the Transgender Military Service Commission, which determined that there is no compelling medical rationale for banning transgender military service. We believe that the Commissioners who completed this study engaged in careful and well-done research, and that their conclusions are based on a reasonable assessment of available evidence.*

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Dr. Kathleen Campbell, associate professor, US Military Academy
Dr. Donald Campbell, professor, US Military Academy
Lt. Col. Edith A. Disler, Ph.D., USAF (ret.), former professor, US Air Force Academy
Dr. Barry S. Fagin, professor, US Air Force Academy
Dr. Gregory D. Foster, professor, National Defense University
Dr. Clementine Fujimura, professor, US Naval Academy
Dr. Elizabeth L. Hillman, former instructor, US Air Force Academy
Dr. Janice H. Laurence, former professor, Naval Postgraduate School
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*The views expressed in this statement by current and former faculty at US Government Agencies are those of the individuals and do not necessarily reflect the official policy or position of their respective university, their Service, the Department of Defense or the US Government.

¹ We are grateful to the numerous individuals who contributed to this project including Jameson Casentini, Janelle Downing, Jacob Eleazer, Dr. Nathaniel Frank, Dr. Richard Frankenstein, Dr. Maurice Garcia, Dr. Jody Herman, Dr. Arnold Gass, Dr. Gary Gates, Dr. Louis Gooren, Dr. Jamison Green, Dr. Dan Grossman, Dr. Wylie Hembrie, Dr. Michael Kauth, Mara Keisling, Christopher Mathews, JD, Diane Mazur, JD, Dr. Christopher Neff, Paula Neira, Dr. Lealah Pollock, Kerri Ryer, Dr. Loren Schechter, Dr. Christopher Salgado, Dr. Jae Sevelius, Dr. Jillian Shipherd and Brynn Tannehill.

² See Gary Gates and Jody Herman (forthcoming). *Transgender Military Service in the United States*, Los Angeles, CA: Williams Institute. Drs. Gates and Herman are in the process of updating their calculations.

³ Adam F. Yerke and Valory Mitchell (2013). Transgender People in the Military: Don't Ask? Don't Tell? Don't Enlist!, *Journal of Homosexuality*, 60:2-3, 436-457.

⁴ Yerke and Mitchell, *Transgender People in the Military*, 445. Also see Jack Drescher, Peggy Cohen-Kettenis, and Sam Winter (2012), *Minding the Body: Situating Gender Identity Diagnoses in the ICD-11*, *International Review of Psychiatry*, 24(6), 573.

⁵ Ilan H. Meyer and Mary E. Northridge, eds. (2007). *The Health of Sexual Minorities: Public Health Perspectives on Lesbian, Gay, Bisexual and Transgender Populations*. New York, NY: Springer.

⁶ Nils Daulaire (November 12, 2013). A Victory for LGBT Health in the Americas. *Huffington Post*, accessed December 26, 2013 at www.huffingtonpost.com/nils-daulaire/a-victory-for-lgbt-health_b_4262367.html.

⁷ See *Fields v. Smith*, 653 F.3d 550 (7th Cir. 2011).

⁸ For example, “For many gender non-conforming people, transition as a framework has no meaning in expressing their gender – there may be no transition process at all, but rather a recognition of a gender identity that defies convention or conventional categories.” Jaime M. Grant, Lisa A. Mottet and Justin Tanis (2011). *Injustice at Every Turn: A Report of the National Transgender Discrimination Survey*. Washington, DC: National Center for Transgender Equality and National Gay and Lesbian Task Force, 26.

⁹ Cross-dressing by non-transgender individuals is beyond the scope of our analysis.

¹⁰ Gates and Herman, *Transgender Military Service*. Their veteran category includes 4,650 individuals in the standby and retired reserve. At the time of writing, the active, Guard and reserve components included 2,280,875 personnel.

¹¹ N = 1,261. Jack Harrison-Quintana and Jody L. Herman (2013). Still Serving in Silence: Transgender Service Members and Veterans in the National Transgender Discrimination Survey. *LGBTQ Policy Journal at the Harvard Kennedy School*, 5.

¹² The peer-reviewed studies are John R. Blosnich, George R. Brown, Jillian C. Shipherd, Michael Kauth, Rebecca I. Piegari, and Robert M. Bossarte (2013). Prevalence of Gender Identity Disorder and Suicide Risk Among Transgender Veterans Utilizing Veterans Health Administration Care. *American Journal of Public Health*, 103:10, 27-32; George R. Brown (1988). Transsexuals in the Military: Flight into Hypermasculinity. *Archives of Sexual Behavior*, 17:6, 527-537; Everett McDuffie and George R. Brown (2010). Seventy U.S. Veterans with Gender Identity Disturbances: A Descriptive Study. *International Journal of Transgenderism*, 12:1, 21-30; Franklin D. Jones, Michael G. Deeken and Steven D. Eshelman (1984). Sexual Reassignment Surgery and the Military: Case Reports. *Military Medicine*, 149:5, 271-275; Matthew F. Kerrigan (2012). Transgender Discrimination in the Military, The New Don't Ask, Don't Tell. *Psychology, Public Policy, and Law*, 18:3, 500–518; Jillian C. Shipherd, Lauren Mizock, Shira Maguen and Kelly E. Green (2012). Male-to-Female Transgender Veterans and VA Health Care Utilization. *International Journal of Sexual Health*, 24:1, 78-87; and Yerke and Mitchell, *Transgender People in the Military*. The three non peer-reviewed studies are Harrison-Quintana and Herman, *Still Serving in Silence*; Bryant and Schilt (2008), *Transgender People in the U.S. Military*, Santa Barbara, CA: Palm Center; and Tarynn M. Witten (2007). *Gender Identity and the Military: Transgender, Transsexual, and Intersex-identified Individuals in the U.S. Armed Forces*. Santa Barbara, CA: Palm Center.

¹³ *Doe v. Alexander*, 510 F. Supp. 900 (D. Minn. 1981).

¹⁴ *Leyland v. Orr*, 828 F. 2d 584 (9th Cir. 1987).

¹⁵ *DeGroat v. Townsend*, 495 F. Supp. 2d 845 (S.D. Ohio 2007).

¹⁶ Department of Defense Instruction (DODI) 6130.03, *Medical Standards for Appointment, Enlistment, or Induction in the Military Services*, April 28, 2010, Incorporating Change 1, September 13, 2011.

¹⁷ DODI 6130.03, *Medical Standards for Appointment*, at ¶ 4(c).

¹⁸ Paraphilia is sexual arousal to an atypical object. See American Psychiatric Association (2013). *Diagnostic and Statistical Manual* (5th ed.). Arlington, VA: American Psychiatric Publishing.

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- ¹⁹ DODI 6130.03, *Medical Standards for Appointment*, Enclosure 2, at ¶ 3(b).
- ²⁰ AR 40-501, *Standards of Medical Fitness*, December 14, 2007, at ¶ 1-6(b).
- ²¹ Army Reg. 40-501, *Standards of Medical Fitness*, at ¶ 1-6(h).
- ²² Department of Defense Instruction 1332.38, *Physical Disability Evaluation*, November 14, 1996, Incorporating Change 2, April 10, 2013.
- ²³ DODI 1332.38, *Physical Disability Evaluation*, Enclosure 5, at ¶ 1.3.9.6.
- ²⁴ Department of Defense Instruction 1332.14, *Enlisted Administrative Separations*, August 28, 2008, Incorporating Change 3, September 30, 2011.
- ²⁵ DODI 1332.14, *Enlisted Administrative Separations*, Enclosure 3, at ¶ 3(a)8.
- ²⁶ See, for example, US Marine Corps MCIWEST-MCB CAMPEN ORDER 6000.1, *Reporting of Prescribed Medications and Medical Treatment Outside the Military Health System*, October 1, 2012.
- ²⁷ Jillian C. Shipherd, Lauren Mizock, Shira Maguen and Kelly E. Green (2012). Male-to-Female Transgender Veterans and VA Health Care Utilization. *International Journal of Sexual Health*, 24:1, 85.
- ²⁸ Harrison-Quintana and Herman, Still Serving in Silence, 6.
- ²⁹ Everett McDuffie and George R. Brown (2010). Seventy U.S. Veterans with Gender Identity Disturbances: A Descriptive Study. *International Journal of Transgenderism*, 12:1, 21-30.
- ³⁰ DODI 6130.03 requires a reference to diagnostic codes in the International Classification of Diseases (ICD-9), and the ICD does list diagnoses for both transsexualism and gender identity disorder. DOD translates DSM-IV diagnoses to the closest ICD code.
- ³¹ In the World Professional Association for Transgender Health Standards of Care, dysphoria refers to the distress itself, not the incongruence between gender identity and assigned sex. See Eli Coleman et al. (2011). Standards of Care for the Health of Transsexual, Transgender, and Gender-Nonconforming People, Version 7. *International Journal of Transgenderism*, 13, 168. Indeed, non-transgender people can experience gender dysphoria. For example, some men who are disabled in combat, especially if their injury includes genital wounds, may feel that they are no longer men because their bodies do not conform to their concept of manliness. Similarly, a woman who opposes plastic surgery, but who must undergo mastectomy because of breast cancer, may find that she requires reconstructive breast surgery in order to resolve gender dysphoria arising from the incongruence between her body without breasts and her sense of herself as a woman.
- ³² Coleman et al., Standards of Care, 168.
- ³³ Drescher, Cohen-Kettenis, and Winter, *Minding the Body*, 575.
- ³⁴ Drescher, Cohen-Kettenis, and Winter, *Minding the Body*, 569; 574.
- ³⁵ Meyer and Northridge, *The Health of Sexual Minorities*.
- ³⁶ Drescher, Cohen-Kettenis, and Winter, *Minding the Body*, 573.
- ³⁷ Coleman et al., Standards of Care, 230, citing findings of Jan Eldh, Agnes Berg and Maria Gustafsson (1997). Long-Term Follow Up After Sex Reassignment Surgery. *Scandinavian Journal of Plastic and Reconstructive Surgery and Hand Surgery*, 31, 1, 39-45; Luk Gijs and Anne Brewaeys (2007). Surgical Treatment of Gender Dysphoria in Adults and Adolescents: Recent Developments, Effectiveness, and Challenges. *Annual Review of Sex Research*, 18, 1, 178-224; M.H. Murad, M.B. Elamin, M.Z. Garcia, R.J. Mullan, A. Murad, P.J. Erwin and V.M. Montori (2010). Hormonal Therapy and Sex Reassignment: A Systematic Review and Meta-Analysis of Quality of Life and Psychosocial Outcomes. *Clinical Endocrinology*, 72, 2, 214-231; F. Pfäfflin and A. Junge (1998). Sex Reassignment. Thirty Years of International Follow-up Studies After Sex Reassignment Surgery: A Comprehensive Review, 1961-1991 (Translated from German into English by Roberta B. Jacobson and Alf B. Meier), retrieved from <http://web.archive.org/web/20070503090247/http://www.symposion.com/ijt/pfaefflin/1000.htm>; and Richard Green and Davis Fleming (1990). Transsexual Surgery Follow-Up: Status in the 1990s. *Annual Review of Sex Research*, 1, 1, 163-174.
- ³⁸ Coleman et al., Standards of Care, 230; Murad et al., Hormonal Therapy and Sex Reassignment; G. De Cuyper, G. T'Sjoen, R. Beerten, G. Selvaggi, P. De Sutter, P. Hoebeke and R. Rubens (2005). Sexual and Physical Health after Sex Reassignment Surgery. *Archives of Sexual Behavior*, 34, 6, 679-690; B. Kuiper and P. Cohen-Kettenis (1988). Sex Reassignment Surgery: A Study of 141 Dutch Transsexuals. *Archives of Sexual Behavior*, 17, 5, 439-457; R. N. Gorton (2011). The Costs and Benefits of Access to Treatment for Transgender People. Prepared for the San Francisco Department of Public Health, San Francisco.
- ³⁹ Anne Gaderman et al. (2012). Prevalence of DSM-IV Major Depression Among U.S. Military Personnel. *Military Medicine*, 177.
- ⁴⁰ Kim Murphy (April 7, 2012). A Fog of Drugs and War. *Los Angeles Times*.

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- ⁴¹ Katherine Blakeley and Don J. Jansen (2013). *Post-Traumatic Stress Disorder and Other Mental Health Problems in the Military: Oversight Issues for Congress*. Washington, DC: Congressional Research Service, 2, citing Mental Disorders and Mental Health Problems, Active Component, US Armed Forces, 2000-2011 (June 2012). *Medical Surveillance Monthly Report*, 19, 6, 11-17.
- ⁴² Paul R. Sackett and Anne S. Mavor, eds. (2006). *Assessing Fitness for Military Enlistment Physical, Medical, and Mental Health Standards*. Washington, DC: The National Academies Press, 144.
- ⁴³ Ministry of Defence. *Policy for the Recruitment and Management of Transsexual Personnel in the Armed Forces*. January, 2009, London: UK.
- ⁴⁴ Coleman et al., *Standards of Care*, 189.
- ⁴⁵ Older MTFs, beyond the age of most service members, may risk cardiovascular disease as a consequence of hormone therapy. Testosterone may increase the risk of Type 2 diabetes, hypertension, and cardiovascular disease for older FTMs.
- ⁴⁶ H. Asscheman, E.J. Giltay, J.A. Megens, W.P. de Ronde, M.A. van Trotsenburg, and L.J. Gooren (2011). A Long-Term Follow-Up Study of Mortality in Transsexuals Receiving Treatment with Cross-Sex Hormones. *European Journal of Endocrinology*, 164, 4, 635-42; Paul Van Kesteren et al. (1997). Mortality and Morbidity in Transsexual Subjects Treated with Cross-Sex Hormones. *Clinical Endocrinology*, 47, 3, 337-343; M. Colizzi, R. Costa, and O. Todarello (2014). Transsexual Patients' Psychiatric Comorbidity and Positive Effect of Cross-Sex Hormonal Treatment on Mental Health: Results from a Longitudinal Study. *Psychoneuroendocrinology*, 39:65-73.
- ⁴⁷ H. Asscheman et al. (August 14, 2013). Venous Thrombo-Embolism as a Complication of Cross-Sex Hormone Treatment of Male-to-Female Transsexual Subjects: A Review. *Andrologia*. Published online.
- ⁴⁸ Tom Waddell Health Center (2006). *Protocols for Hormonal Reassignment of Gender*. Accessed November 6, 2013 from: <http://www.sfdph.org/dph/comupg/oservices/medSvs/hlthCtrs/TransGendprotocols122006.pdf>.
- ⁴⁹ Department of Defense (2013), *Health Related Behaviors Survey of Active Duty Military Personnel 2011*, 119-120; 130-131; 248; 264-265.
- ⁵⁰ Department of Defense. *Policy Guidance for Deployment-Limiting Psychiatric Conditions and Medications*. 2006 at ¶4.2.3.
- ⁵¹ Andrew Tilghman (May 17, 2010). 'Any Soldier Can Deploy on Anything': Pentagon Rules Bar Some Drugs from Combat Zone, but Oversight is Suspect. *Army Times*.
- ⁵² Tilghman, 'Any Soldier Can Deploy on Anything'.
- ⁵³ Department of the Army. *Personnel Policy Guidance for Overseas Contingency Operations*, 2009 at ¶ 7-13(b)1.
- ⁵⁴ Erika Stetson, for example, served as an Army employee in Afghanistan in 2011 and 2012 under the Civilian Expeditionary Workforce program. Nicole Shouder was appointed to the rank equivalent of Lieutenant Commander in the Military Sealift Command in 2008 and subsequently deployed on four ships including the forward staging base USS Ponce. See Erika Stetson (March/April 2013). Deployed, Trans and Out. *OutServe Magazine*, 13-14; Brynn Tannehill (May/June 2013). A Life of Service. *OutServe Magazine*, 22-23; Brynn Tannehill, (April 25, 2013). Deployed While Trans: The Rachel Bolyard Story. *OutServe Magazine*, accessed at <http://outservemag.com/2013/04/deployed-while-trans-the-rachel-bolyard-story/>
- ⁵⁵ Coleman et al., *Standards of Care*, 170-171.
- ⁵⁶ For a list of 313 allowable, elective cosmetic procedures, see Tricare Management Activity, Uniform Business Office (2013). *Provider's Guide to the Elective Cosmetic Surgery Superbill*.
- ⁵⁷ Patel, Morris and Gassman show that these complications may include "airway, vascular, hemorrhage, vascular compromise, neurologic, infectious, skeletal, unfavorable osteotomy, tooth injury, nonunion, postoperative malocclusion, temporomandibular joint disorders, and unfavorable aesthetic results." See P. Patel, D. Morris, and A. Gassman (2007). Complications of Orthognathic Surgery. *Journal of Craniofacial Surgery*, 18, 4, 975-985. The military allows personnel to have elective cosmetic surgeries on a space-available basis and at their own expense.
- ⁵⁸ Patel, Morris, and Gassman, Complications of Orthognathic Surgery; F. Kramer. C. Baethge, G. Swennen et al. (2004). Intra- and Perioperative Complications of the LeFort I Osteotomy: A Prospective Evaluation of 1000 Patients. *Journal of Craniofacial Surgery*, 15, 6, 971-977; K. Jones (2006). Le Fort II and Le Fort III Osteotomies for Midface Reconstruction and Considerations for Internal Fixation. In A. Greenberg and J. Prein, eds. *Craniofacial Reconstructive and Corrective Bone Surgery*. New York, NY: Springer, 667-668.
- ⁵⁹ Patel, Morris, and Gassman, Complications of Orthognathic Surgery.
- ⁶⁰ Kramer, Baethge, Swennen et al., Intra- and Perioperative Complications.
- ⁶¹ Herman found in a recent study that the highest annualized utilization rate for large employers is 0.044 claimants per thousand employees annually (Table 8). If the military were similar to civilian firms, and given that the active, Guard and reserve components currently include 2,280,875 personnel, then one would expect 0.044x2,281=100 claimants per year if the Military Health System covered gender-confirming surgery. However, transgender people

are over-represented in the military (15,450/2,280,875 million = 0.68% military as compared to .3% of the civilian adult population.) Hence the figure of 100 claimants per year should be adjusted upward by $.68/.3 = 2.3x$. Hence, if the military paid for transition-related surgery, one would expect $2.3 \times 100 = 230$ claims per year. See Jody L. Herman (2013). *Costs and Benefits of Providing Transition-Related Health Care Coverage in Employee Health Benefits Plans*, Los Angeles, CA: Williams Institute.

⁶² Herman, *Costs and Benefits*, 6.

⁶³ Short-term surgical complications can include rectal injury, infection, delayed wound healing, bleeding, venous thromboembolism, and/or urethral stream abnormalities. While many of these complications are either self-limited or may be treated with local wound care, antibiotics, or anticoagulants, some, such as rectal injury, may require additional surgical procedures such as a temporary colostomy. Long-term complications can include vaginal stenosis and unsatisfactory appearance of the surgically reconstructed genitalia, and vaginal stenosis may require additional procedures such as skin grafts or intestinal transposition.

⁶⁴ A.A. Lawrence (2006). Patient-Reported Complications and Functional Outcomes of Male-to-Female Sex Reassignment Surgery. *Archives of Sexual Behavior*, 35, 6, 717-27.

⁶⁵ Cameron Bowman and Joshua M. Goldberg (2006). Care of the Patient Undergoing Sex Reassignment Surgery. *International Journal of Transgenderism*, 9, 135-165; Miroslav L. Djordjevic, Dusan S. Stanojevic and Marta R. Bizic (2011). Rectosigmoid Vaginoplasty: Clinical Experience and Outcomes in 86 Cases. *Journal of Sexual Medicine*, 8, 12, 3487-3494; Ji-Xiang Wu, Bin Li, Wen-Zhi Li, Yong-Guang Jiang, Jie-Xiong Liang, Chen-Xi Zhong (2009). Laparoscopic Vaginal Reconstruction Using an Ileal Segment. *International Journal of Gynecology and Obstetrics*, 107, 3, 258-261; L. Jarolim, J. Sedý, M. Schmidt, O. Nanka, R. Foltán and I. Kawaciuk (2009). Gender Reassignment Surgery in Male-to-Female Transsexualism: A Retrospective 3-Month Follow-Up Study with Anatomical Remarks. *Journal of Sexual Medicine*, 6, 6, 1635-1644; S. V. Perovic, D.S. Stanojevic and M.L.J. Djordjevic (2000). Vaginoplasty in Male Transsexuals Using Penile Skin and a Urethral Flap. *BJU International*, 86, 7, 843-850.

⁶⁶ Presumably, any post-operative MTF individuals with ongoing complications would be screened out at the time of enlistment. Hence the only MTF troops who would be unfit for duty would be those experiencing ongoing post-operative complications from genital surgeries they elected to have after joining the military. As explained previously, if the Military Health Service paid for transition-related care, one would expect 230 claimants per year. Approximately 90 percent of transgender troops are MTF's, thus suggesting $.9 \times 230 = 207$ claimants per year for MTF transition-related coverage. If 5 percent of such claims entailed ongoing post-operative complications, this would mean that 10 MTF transgender troops would become permanently unfit for duty each year.

⁶⁷ Short-term surgical complications related to the vaginectomy include bleeding, and those associated with scrotoplasty include loss of the testicular prostheses related to infection or erosion. Whether undergoing a metoidioplasty with urethral lengthening or phalloplasty, short-term complications include urethral stricture or fistulae, infection, delayed wound healing, and/or venous thromboembolism. These conditions may either be self-limited or require additional procedures such as dilation, stricture release, and/or buccal mucosal grafts, local wound care, antibiotics, or anticoagulation. Additional risks associated with phalloplasty include flap failure and delayed healing of the donor site (most commonly forearm, thigh, or back).

⁶⁸ S. Baumeister, M. Sohn, C. Domke, and K. Exner (2011). Phalloplasty in Female-to-Male Transsexuals: Experience from 259 Cases [Article in German]. *Handchir Mikrochir Plast Chir*, 43, 4, 215-21; J.E. Terrier, F. Courtois, A. Ruffion, N. Morel *Journal* (September 12, 2013). Surgical Outcomes and Patients' Satisfaction with Suprapubic Phalloplasty. *Journal of Sexual Medicine* [Epub ahead of print]; P.A. Sutcliffe, S. Dixon, R.L. Akehurst, A. Wilkinson, A. Shippam, S. White, R. Richards and C.M. Caddy (2009) Evaluation of Surgical Procedures for Sex Reassignment: A Systematic Review *Journal of Plastic, Reconstructive and Aesthetic Surgery*, 62, 3, 294-306; A. Leriche, M.O. Timsit, N. Morel-Journal, A. Bouillot, D. Dembele, A. Ruffion (2008). Long-Term Outcome of Forearm Flee-Flap Phalloplasty in the Treatment of Transsexualism. *BJU International*, 101, 10, 1297-1300; J.J. Hage and A.A. van Turnhout (2006). Long-Term Outcome of Metoidioplasty in 70 Female-to -Male Transsexuals. *Annals of Plastic Surgery*, 57, 3, 312-316; M. Sengezer, S. Oztürk, M. Deveci and Z. Odabaşı (2004). Long-Term Follow-Up of Total Penile Reconstruction with Sensate Osteocutaneous Free Fibula Flap in 18 Biological Male Patients. *Plastic and Reconstructive Surgery*, 114, 2, 439-452.

⁶⁹ Albert Leriche et al. (2008). Long-Term Outcome of Forearm Flee-Flap Phalloplasty in the Treatment of Transsexualism. *BJU international*, 101, 10, 1297-1300.

⁷⁰ Giulio Garaffa, Christopher A. Nim, and David J. Ralph (2010). Total Phallic Reconstruction in Female-to-Male Transsexuals. *European Urology* 57.4, 715-722.

⁷¹ These figures are derived from raw data that informed Grant, Mottet and Tanis, *Injustice at Every Turn*.

⁷² Presumably, any post-operative FTM individuals with ongoing complications would be screened out at the time of enlistment. Hence the only FTM troops who, as a class, would be unfit for duty would be those experiencing ongoing post-operative complications from genital surgeries they elected to have after joining the military. As explained previously, if the Military Health Service paid for transition-related care, one would expect 230 claimants per year. However, only 10 percent of transgender troops are FTMs, thus suggesting $.1 \times 230 = 23$ claimants per year for FTM transition-related coverage. If one quarter of such claims entailed ongoing post-operative complications, this would mean that 6 FTM transgender troops would become permanently unfit for duty each year.

⁷³ The stories of Erika Stetson, Nicole Shouder and Rachel Bolyard were referenced in a previous endnote.

⁷⁴ Department of the Army, *Personnel Policy Guidance for Overseas Contingency Operations*, 2009, at ¶ 7-9(e).

⁷⁵ Ministry of Defence, *Policy for the Recruitment and Management of Transsexual Personnel*.

⁷⁶ DODI 1332.38, *Physical Disability Evaluation*, Enclosure 3, at ¶ P3.4.1.3.

⁷⁷ DODI 1332.38, *Physical Disability Evaluation*, Enclosure 4, at ¶ 1.1.2.

⁷⁸ DODI 1332.38, *Physical Disability Evaluation*, Enclosure 3, at ¶ P3.4.3.

⁷⁹ Department of Defense. *Health Related Behaviors*.

⁸⁰ 10 U.S.C. § 701(a).

⁸¹ Department of Defense Instruction 1327.06, *Leave and Liberty Policy and Procedures*, June 16, 2009, Incorporating Change 2, effective August 13, 2013, Enclosure 2, at ¶ 1c.

⁸² DODI 1327.06, *Leave and Liberty Policy*, Enclosure 2, at ¶¶ 1j(1), 1a.

⁸³ 10 U.S.C. 701(b), (f).

⁸⁴ DODI 1327.06, *Leave and Liberty Policy*, Enclosure 2, at ¶ 1j(2).

⁸⁵ DODI 1327.06, *Leave and Liberty Policy*, Enclosure 2, at ¶ 1k(6).

⁸⁶ DODI 1327.06, *Leave and Liberty Policy*, Enclosure 2, at ¶¶ 1k(2), (5).

⁸⁷ DODI 1327.06, *Leave and Liberty Policy*, Enclosure 2, at ¶ 1k(4).

⁸⁸ DODI 1315.18, *Procedures for Military Personnel Assignments* (January 12, 2005), at ¶ 6.10.

⁸⁹ DODI 1315.18, *Procedures for Military Personnel Assignments*, at ¶¶ 6.10.3, 6.10.4. An alternative option for leave is the Navy's Career Intermission Pilot Program, which allows naval personnel to apply for a transfer from active service into the Individual Ready Reserve for up to three years.

⁹⁰ DODI 1327.06, *Leave and Liberty Policy*, Enclosure 2, at ¶ 1k(1).

⁹¹ Army Regulation 600-8-10, *Leave and Passes* (August 4, 2011 revision), at ¶5-3e.

⁹² Army Medical Command, OTSG/MEDCOM Policy Memo 12-076, *Revised Policy for Cosmetic Surgery Procedures and Tattoo/Brand Removal/Alteration in the Military Health System* (November 20, 2012), at ¶¶ 5e(15), 5f(2).

⁹³ Army Medical Command, *Revised Policy for Cosmetic Surgery*, at ¶ 5(e)(7).

⁹⁴ See, e.g., Department of the Air Force Instruction 36-2110, *Assignments* (Change 2, June 8, 2012), at ¶ 2.17.1.

⁹⁵ Department of the Air Force Instruction 36-2110, *Assignments*, at ¶ 2.17.3 and Table 2.2.

⁹⁶ DODI 1332.38, *Physical Disability Evaluation*, Enclosure 3, at ¶ P7.3.

⁹⁷ Yerke and Mitchell, *Transgender People in the Military*, 442.

⁹⁸ Coleman et al., *Standards of Care*, 170.

⁹⁹ Report of the Army Dismounted Complex Blast Injury Task Force, June 18, 2011, 31.

¹⁰⁰ Government Accountability Office (2012). *VA and DOD Health Care: Department-Level Actions Needed to Assess Collaboration Performance, Address Barriers, and Identify Opportunities*, GAO-12-992. Washington, DC; Government Accountability Office (2011). *DOD and VA Health Care: Action Needed to Strengthen Integration Across Care Coordination and Case Management Programs*, GAO 12-129T. Washington, DC.

¹⁰¹ D.M. Lam (2007). The Trauma Continuum-of-Care Quality Forum Integration Committee System-Wide Video Teleconference. *Military Medicine* 172, 6, 611.

¹⁰² S. Marble (2013). Origins of the Physical Profile. *Military Medicine* 178, 8, 887.

¹⁰³ E. Granger et al. (2010). Historical Evolution of Medical Quality Assurance in the Department of Defense. *Military Medicine* 175, 8, 581.

¹⁰⁴ B. Kerr (2007). The Joint Military Medical Executive Skills Initiative: An Impressive Response to Changing Human Resource Management Rules of Engagement. *Military Medicine* 172, 1, 49.

¹⁰⁵ T. Harold (2011). The Evolution of Dependent Medical Care in the U.S. Army. *Military Medicine* 176, 10, 1133.

¹⁰⁶ G. Bathalon (2006). The Effect of Proposed Improvements to the Army Weight Control Program on Female Soldiers. *Military Medicine* 171, 8, 800.

¹⁰⁷ Rapid Action Revision, September 13, 2011, to Army Regulation 601-270, OPNAVINST 1100.4C Ch-2, AFI36-2003_IP, MCO1100.75F, and COMDTINST M1100.2E, *Military Entrance Processing Station (MEPS)*, http://www.apd.army.mil/jw2/xmldemo/r601_270/main.asp

¹⁰⁸ DODI 6130.03, *Medical Standards for Appointment*, Enclosure 4 at ¶¶ 14-15, 25, 29.

¹⁰⁹ DODI 1332.38, *Physical Disability Evaluation*, Enclosure 5; DODI 1332.14, *Enlisted Administrative Separations*, Enclosure 3, at ¶ 3(a)(8)(a).

Dr. M. Joycelyn Elders, MD

Joycelyn Elders, the first person in the state of Arkansas to become board certified in pediatric endocrinology, was the sixteenth Surgeon General of the United States, the first African American and only the second woman to head the US Public Health Service. Long an outspoken advocate of public health, Elders was appointed Surgeon General by President Clinton in 1993.



Born to poor farming parents in 1933, Dr. Elders grew up in a rural, segregated, poverty-stricken pocket of Arkansas. She was the eldest of eight children, and she and her siblings had to combine work in the cotton fields from age five with their education at a segregated school thirteen miles from home. They often missed school during harvest time, September to December.

After graduating from high school, she earned a scholarship to the all-black liberal arts Philander Smith College in Little Rock. While she scrubbed floors to pay for her tuition, her brothers and sisters picked extra cotton and did chores for neighbors to earn her \$3.43 bus fare. In college, she enjoyed biology and chemistry, but thought that lab technician was likely her highest calling. Her ambitions changed when she heard Edith Irby Jones, the first African American to attend the University of Arkansas Medical School, speak at a college sorority. Dr. Elders—who had not even met a doctor until she was 16 years old—decided that becoming a physician was possible, and she wanted to be like Jones.

After college, Dr. Elders joined the Army and trained in physical therapy at the Brooke Army Medical Center at Fort Sam Houston, Texas. After discharge in 1956 she enrolled at the University of Arkansas Medical School on the G.I. Bill. Although the Supreme Court had declared separate but equal education unconstitutional two years earlier, Elders was still required to use a separate dining room—where the cleaning staff ate. She met her husband, Oliver Elders, while performing physical exams for the high school basketball team he managed, and they were married in 1960.

Dr. Elders did an internship in pediatrics at the University of Minnesota, and in 1961 returned to the University of Arkansas for her residency. She became chief resident in charge of the all-white, all-male residents and interns, earned her master's degree in biochemistry in 1967 and became an assistant professor of pediatrics at the university's medical school in 1971 and full professor in 1976.

Over the next twenty years, Dr. Elders combined her clinical practice with research in pediatric endocrinology, publishing well over a hundred papers, most dealing with problems of growth and juvenile diabetes. This work led her to study of sexual behavior and her advocacy on behalf of adolescents. She saw that young women with diabetes face health risks if they become pregnant too young—including spontaneous abortion and possible congenital abnormalities in the infant. She helped her patients to control their fertility and advised them on the safest time to start a family.

Governor Bill Clinton appointed Joycelyn Elders head of the Arkansas Department of Health in 1987. As she campaigned for clinics and expanded sex education, she caused a storm of controversy among conservatives and some religious groups. Yet, largely because of her lobbying, in 1989 the Arkansas Legislature mandated a K-12 curriculum that included sex education, substance-abuse prevention, and programs to promote self-esteem. From 1987 to 1992, she nearly doubled childhood immunizations, expanded the state's prenatal care program, and increased home-care options for the chronically or terminally ill.

In 1993, President Clinton appointed Dr. Elders US Surgeon General. Despite opposition from critics, she was confirmed and sworn in on September 10, 1993. During her fifteen months in office she faced skepticism regarding her policies yet continued to bring controversial issues up for debate. As she later concluded, change can only come about when the Surgeon General can get people to listen and talk about difficult subjects.

Dr. Elders left office in 1994 and in 1995 she returned to the University of Arkansas as a faculty researcher and professor of pediatric endocrinology at the Arkansas Children's Hospital. In 1996 she wrote her autobiography, *Joycelyn Elders, M.D.: From Sharecropper's Daughter to Surgeon General of the United States of America*. Now retired from practice, she is a professor emeritus at the University of Arkansas School of Medicine, and remains active in public health education.

Professor George R, Brown, MD, DFAPA

George R. Brown, MD, DFAPA, is Associate Chairman and Professor of Psychiatry at East Tennessee State University in Johnson City, TN. He is currently serving his third term on the Board of Directors for the World Professional Association for Transgender Health, the only international organization that focuses on transgender health, where he also serves as a member of the Incarceration/Institutionalization Committee and the Standards of Care Committee. He is a coauthor on the last three versions of the Standards of Care.



Dr. Brown served as Chief of Psychiatry at Mountain Home VAMC for 18 years and served 12 years in the US Air Force as a psychiatrist. He has worked with transgender active-duty service members and with veterans during his 30 years of active clinical work in the area of gender dysphoria, and continues to evaluate and treat transgender veterans. He has assisted with the VA national workgroups tasked with educating VHA clinicians about how to deliver competent and respectful transgender health care.

Actively involved in working with legal cases on behalf of transgender persons seeking access to nondiscriminatory transgender health care in the United States, Dr. Brown has served as an expert witness in several national precedent-setting cases that have benefitted transgender persons. He has published over 135 articles and scientific abstracts, as well as 22 book chapters, many of which have been on transgender health care issues. And, he has presented his work on transgender issues at one third of the medical schools in the US as well as in seven nations.

Dr. Brown is a University of Rochester School of Medicine graduate who subsequently did residency at Wright State University as an officer in the USAF. He is board certified in General Psychiatry and a Distinguished Fellow in the American Psychiatric Association. His areas of expertise include gender identity disorders/gender dysphoria and psychopharmacology. Dr. Brown supervises resident research electives at the VA and encourages residents to develop a better understanding of the potential contributions of research on clinical practice through his example as an accomplished clinical researcher.

Professor Eli Coleman, PhD

Professor Eli Coleman is director of the Program in Human Sexuality, Department of Family Medicine and Community Health, University of Minnesota Medical School in Minneapolis, where he holds the first and only endowed academic chair in sexual health. Dr. Coleman has authored articles and books on a variety of sexual health topics, including compulsive sexual behavior, sexual orientation, and gender dysphoria.



He is founding editor of the *International Journal of Transgenderism* and founding and current editor of the *International Journal of Sexual Health*. He is past president of the Society for the Scientific Study of Sexuality, the World Professional Association for Transgender Health (formerly the Harry Benjamin International Gender Dysphoria Association), the World Association for Sexual Health, and the International Academy for Sex Research. In 2013, he was elected President of the Society for Sex Therapy and Research for a two-year term

He has been a frequent technical consultant on sexual health issues to the World Health Organization (WHO), the Pan American Health Organization (the regional office of WHO), and the Centers for Disease Control and Prevention. And, he has been the recipient of numerous awards including the US Surgeon General's Exemplary Service Award for his role as senior scientist on *Surgeon General's Call to Action to Promote Sexual Health and Responsible Sexual Behavior*, released in 2001. He was given the Distinguished Scientific Achievement Award from the Society for the Scientific Study of Sexuality and the Alfred E. Kinsey Award by the Midcontinent Region of the Society for the Scientific Study of Sexuality in 2001. In 2007, he was awarded the Gold Medal for his lifetime contributions to the field of sexual health by the World Association for Sexual Health.

In 2007, he was appointed the first endowed Chair in Sexual Health at the University of Minnesota Medical School, and in 2009 he was awarded the Masters and Johnson Award by the Society for Sex Therapy and Research. In 2011, he received the John Money Award from the Eastern Region of the Society for the Scientific Study of Sexuality.

BG Thomas A. Kolditz, PhD, USA (Ret.)

General Kolditz is Professor in the Practice of Leadership and Management and Director of the Leadership Development Program at the Yale School of Management. He has been one of the nation's leading development experts for four decades in the public, private, and social sectors. A Professor Emeritus at the US Military Academy, General Kolditz led the Department of Behavioral Sciences and Leadership at West Point for twelve years. In that role, he was responsible for teaching, research, and outreach activities in management, leader development science, psychology, and sociology.



A highly experienced global leader, General Kolditz has served for more than 26 years in leadership roles on four continents. His career has focused both on leading organizations and studying leadership and leadership policy across sectors. He served for two years as a leadership and human resources policy analyst in the Pentagon, and a year as a concept developer in the Center for Army Leadership, and was the founding director of the West Point Leadership Center. He was instrumental in the design and formation of the Thayer Leader Development Group, and is the managing member of Saxon Castle LLC, a leader development consultancy.

Professor Kolditz is an internationally recognized expert on crisis leadership and leadership in extreme contexts and in the development of programs to inculcate leadership and leader development in everything from project teams to large organizations. He has published extensively across a diverse array of academic and leadership trade journals, and serves on the editorial and advisory boards of several academic journals. He is a fellow in the American Psychological Association and is a member of the Academy of Management. In 2007, while still on active duty, General Kolditz was appointed a visiting professor at the Yale School of Management, where he designed a crisis leadership course and taught in the school's MBA curriculum for three years.

His most recent book, *In Extremis Leadership: Leading as if Your Life Depended on It*, was based on more than 175 interviews conducted on the ground in Iraq during combat operations. He has been named as a leadership Thought Leader by the Leader to Leader Institute and as a Top Leader Development Professional by Leadership Excellence. In 2009, he was named to the Council of Senior Advisors, Future of Executive Development Forum.

RADM Alan M. Steinman, MD, USPHS/USCG (Ret.)

Rear Admiral Alan M. Steinman was commissioned in the United States Public Health Service as a lieutenant in July, 1972, to commence a military career of over 25 years in the United States Coast Guard and the Public Health Service. He served as senior medical officer at the USCG Support Center, Elizabeth City, NC, from July to September, 1972; as senior medical officer and flight surgeon at USCG Air Station, Cape Cod, MA, from 1973 to 1974; as senior medical officer and flight surgeon at USCG Air Station, Port Angeles, WA, from 1974 to 1976, as senior medical officer and flight surgeon at USCG Air Station, Astoria, OR, from 1976 to 1978; and as medical officer and flight surgeon at USCG Support Center, Kodiak, AK, from January to May, 1987.



During these operational assignments, Dr. Steinman flew on countless emergency medical helicopter evacuations of ill and injured seamen, fisherman, recreational boaters, loggers and military active duty personnel. His expertise in emergency medicine and in cold-weather operations, particularly in the areas of sea-survival, hypothermia and drowning, led to his initial assignment at Coast Guard Headquarters as the Chief of Special Medical Operations from 1978 to 1982.

Dr. Steinman served as Medical Advisor for search and rescue operations in the USCG HQ Search and Rescue Division of the Office of Operations from 1982 to 1984. He then attended the University of Washington in Seattle, WA, where he earned a Masters of Public Health. Following his tour of duty at Kodiak, AK, he returned to USCG HQ as the Chief of Clinical and Preventive Medicine from April, 1987, to September, 1990. Dr. Steinman next served under the US Surgeon General (Dr. C. Everett Koop) as the Deputy Director of Medical Affairs at USPHS HQ from September, 1989, to February, 1990, following which he served as Chief of the Medical Branch at USPHS HQ until February, 1991. He returned to USCG HQ as Chief of the Wellness Branch from February, 1991, to August, 1993.

RADM Steinman was selected for promotion to flag officer in August, 1993, for the position of Director of Health and Safety at USCG HQ (equivalent to both the Surgeon General and Chief of Safety Programs for the other branches of the armed forces). He retired from the Coast Guard and the Public Health Service in September, 1997. Following his retirement, Admiral Steinman was appointed to the Presidential Special Oversight Board for Department of Defense Investigations of Gulf-War Chemical and Biological Incidents, where he served under Senator Warren Rudman (R-NH) as the chief medical advisor for the Board from July, 1998, to January, 2001.

Admiral Steinman's educational degrees include a Bachelor of Science in 1966 from the Massachusetts Institute of Technology; a Doctor of Medicine in 1971 from the Stanford University School of Medicine; and a Master of Public Health in 1986 from the University of Washington. His first post-graduate year in medicine was at the Mayo Graduate School of Medicine in Rochester, MN, in 1971. Dr. Steinman also graduated from the US Navy School of Aerospace Medicine, where he earned the designation of US Navy Flight Surgeon in 1973.

Dr. Steinman is Board Certified in Occupational Medicine and is a Fellow of the American College of Preventive Medicine.

During his tenure as Director of Health and Safety, RADM Steinman managed a comprehensive health care program for over 160,000 beneficiaries with a budget of over \$250 million. He also served as the Director of the Coast Guard's Safety and Environmental Health programs, overseeing the safety of all USCG personnel. He has an international reputation in cold-weather medicine, hypothermia and sea-survival, and he is widely published in these areas, including numerous articles in medical journals and chapters in textbooks of emergency medicine and cold-weather medicine. He has lectured at various national and international conferences and universities on hypothermia, sea-survival and drowning.

RADM Steinman's decorations include the Distinguished Service Medal, the Legion of Merit, the Meritorious Service Medal, two USCG Commendation medals, the USCG Achievement medal, the USPHS Commendation medal, two USPHS Unit Commendation Medals, the USPHS Surgeon General's Medallion, and the USPHS Surgeon General's Exemplary Service Medal. RADM Steinman currently serves as a consultant in cold-weather medicine and holds the position of Professional Affiliate with the Health, Leisure and Human Performance Research Institute at the University of Manitoba. He is a scientific referee for various journals of environmental and occupational medicine. He serves on the Honorary Board of Directors for the Servicemembers Legal Defense Network, and he is co-founder of the Puget Sound Chapter of the American Veterans for Equal Rights.

RADM Steinman is the most senior military officer to self-identify as gay after his retirement; he served on the Military Advisory Council for Servicemembers Legal Defense Network, as an advisor for Servicemembers United, Service Women's Action Network and the Palm Center. He is also a founding member of the Puget Sound Chapter of American Veterans for Equal Rights. He was selected to brief President-elect Obama's transition team on the issue of Don't Ask, Don't Tell; he also met with the senior members of the Pentagon's working group on gays in the military, and he was invited by the White House to attend the Presidential Signing Ceremony repealing the Don't Ask, Don't Tell law. For the past five years, RADM Steinman has lectured to college classes on Joint Base Lewis-McChord on the issue of DADT. RADM Steinman lives with his seven-year-old adopted son and his husband in Olympia, WA.