

Medical Aspects of Transgender Military Service

Armed Forces & Society

2015, Vol. 41(2) 199-220

© The Author(s) 2014

Reprints and permission:

sagepub.com/journalsPermissions.nav

DOI: 10.1177/0095327X14545625

afs.sagepub.com



**M. Joycelyn Elders¹, George R. Brown²,
Eli Coleman³, Thomas A. Kolditz⁴,
and Alan M. Steinman⁵**

Editor's note: This is the first of three articles in this issue on transgender issues in the military.

Abstract

At least eighteen countries allow transgender personnel to serve openly, but the United States is not among them. In this article, we assess whether US military policies that ban transgender service members are based on medically sound rationales. To do so, we analyze Defense Department regulations and consider a wide range of medical data. Our conclusion is that there is no compelling medical reason for the ban on service by transgender personnel, that the ban is an unnecessary barrier to health care access for transgender personnel, and that medical care for transgender individuals should be managed using the same standards that apply to all others. Removal of the military's ban on transgender service would improve health outcomes, enable commanders to better care for their troops, and reflect the military's commitment to providing outstanding medical care for all military personnel.

Keywords

transgender service members, medical care, mental health, "don't ask, don't tell"

¹ University of Arkansas College of Medicine (Emeritus), Little Rock, AR, USA

² East Tennessee State University, Johnson City, TN, USA

³ Department of Family Medicine and Community Health, University of Minnesota Medical School, Duluth, MN, USA

⁴ Yale School of Management, New Haven, CT, USA

⁵ US Coast Guard (Retired), Olympia, WA, USA

Corresponding Author:

Thomas A. Kolditz, Yale School of Management, P.O. Box 208200, New Haven, CT 06520-8200, USA.
Email: thomas.kolditz@yale.edu

Introduction

At least eighteen countries allow transgender personnel to serve openly, but the United States is not among them.¹ When “don’t ask, don’t tell” was overturned in 2011, gay, lesbian, and bisexual personnel were allowed to serve openly, but regulations banning transgender military service remained in place. Unlike the rationales that justified excluding gays, lesbians, and bisexuals, and that emphasized operational issues including readiness, cohesion, recruitment and morale, the rules barring transgender military service are, for the most part, embedded in medical regulations, and are premised on assumptions about the medical fitness of transgender personnel.² Despite the repeal of “don’t ask, don’t tell,” and the fact that the Veterans Health Administration (VHA) enacted a 2011 policy mandating the provision of health care benefits to transgender veterans, medical regulations that bar the service of transgender personnel have not been updated.³ In this article, we conduct the first-ever analysis of the plausibility of rationales that justify regulations prohibiting transgender service.⁴ After a brief introduction, we discuss Defense Department regulations barring transgender service as well as the four medical rationales that justify them. Then, we assess the plausibility of each rationale.

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.⁵ There are an estimated 700,000 transgender American adults, representing 0.3 percent of the nation’s adult population. While some military regulations and legal cases that we discuss refer to *transsexuals*, and while some transgender people use the term *transsexual* to describe someone who lives permanently with a gender different from their sex at birth, many view the term as outdated and no longer use it, which is why we use the term *transgender* in this article.

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 therapy (CSH) to do so. Survey data indicate that 76 percent of transgender individuals have had cross-sex hormone therapy and that only a small minority have had genital reconstructive surgery.⁶ The transition period for most people lasts between one and six months.⁷

Scholars estimate that 15,500 transgender individuals serve in the US armed forces, including 8,800 in the active component and 6,700 in the National Guard and Reserve components, and that 134,000 veterans are transgender.⁸ Transgender adult citizens are more than twice as likely as non-transgender Americans (2.2 percent transgender vs. 0.9 percent non-transgender) to serve currently in the military.⁹ We are only aware, however, of approximately two dozen service members who have been discharged because of their transgender identity in recent years.¹⁰

Defense Department Regulations Barring Transgender Service

Transgender individuals are not allowed to enlist or serve in the US armed forces, and the rules barring their participation in the military are articulated in medical regulations that govern accession and retention. Medical standards for enlistment and retention are designed to ensure that service members are free of conditions that would interfere with duty performance, endanger oneself or others, or impose undue burdens for medical care, and current regulations contain a list of disqualifying conditions that preclude applicants from joining or remaining in the military. Accession regulations that are articulated in Department of Defense Instruction (DODI) 6130.03, *Medical Standards for Appointment, Enlistment, or Induction in the Military Services* disqualify physical conditions including “abnormalities or defects of the genitalia including but not limited to change of sex, hermaphroditism, pseudo-hermaphroditism, or pure gonadal dysgenesis” and “learning, psychiatric, and behavioral” conditions such as “current or history of psychosexual conditions, including but not limited to transsexualism, exhibitionism, transvestism, voyeurism, and other paraphilias.”¹¹ Thus, the accession prohibition against transgender military service includes both a physical component barring “change of sex” and a psychological component barring “psychosexual conditions, including but not limited to transsexualism.”

Retention regulations contained in DODI 1332.14, *Enlisted Administrative Separations* include “sexual gender and identity disorders” as grounds for administrative separation at the discretion of a commander.¹² Even though retention regulations do not include a physical component such as “change of sex,” gender-confirming surgery would surely be taken as evidence of a “sexual gender and identity disorder” and would thus subject any service member who changed their gender surgically to discharge. Even transgender service members who do not wish to take hormones, have surgery, or undergo any other aspect of gender transition are subject to discharge under the psychological components of the accession and retention regulations.

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.”¹³ 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.”¹⁴

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.”¹⁵ As discussed previously, 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.

We conducted a comprehensive review of all Department of Defense (DOD)-wide as well as Army and Navy/Marine regulations governing transgender service, but we do not address service-specific rules here because they are largely consistent with DOD-wide regulations discussed in this section.¹⁶ Air Force medical standards governing enlistment and retention were removed from public access upon the latest revision of Air Force Instruction 48-123, *Medical Examinations and Standards*, in November 2013.

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 to preserve health and good order. While regulations do not offer reasons for banning transgender service members, several transgender individuals have challenged the policy in court and military representatives have presented rationales via testimony and affidavit. In *Doe v. Alexander*, 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.”

In testimony for *Leyland v. Orr*, 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.” Finally, in *DeGroat v. Townsend*, an Air Force consulting physician stated that “Individuals who have undergone sex change procedures would not be qualified for world-wide service” in part because they could 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.”¹⁷

The regulations, in short, appear to be premised on the notion that in four different ways, transgender personnel are not medically fit and that addressing their medical needs would place an undue burden on commanders and doctors. Specifically, the regulations appear to be justified by the notions that (1) transgender personnel are too prone to mental illness to serve, (2) cross-sex hormone therapy is too risky for medical personnel to administer and monitor, (3) gender-confirming surgery is too

complex and too prone to postoperative complications to permit, and (4) transgender personnel are not medically capable of deploying safely.¹⁸ We address each of these rationales in turn.

Mental Health

Some of the 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.”¹⁹ In a sample of 1,261 transgender respondents with prior military service, 40 percent had attempted suicide. Among seventy 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].”²⁰

Despite such data, arguments based on mental health are not convincing rationales for prohibiting transgender military service for two reasons. First, and as discussed in greater detail subsequently, DODI 6130.03, the document that lays out medical standards that bar service for transgender personnel, is based on the outdated view that simply having a transgender identity is a mental illness.²¹ Indeed, scientists have abandoned psychopathological understandings of transgender identity, and no longer classify gender nonconformity as a mental illness. Second, in contrast to rules categorically barring all transgender personnel regardless of fitness for duty, military regulations governing most psychological conditions 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. Given that many service members diagnosed with a range of psychological conditions are allowed to serve and, as discussed subsequently, having a transgender identity is no longer considered a mental illness, it is implausible to suggest that the military must ban transgender personnel because they are not mentally fit to serve.

While mental health professionals used to consider transgender identity as a mental illness, this is no longer the case. In the newest edition of the *Diagnostic and Statistical Manual (DSM-5)*, a comprehensive classification of psychological conditions and mental disorders that reflects the most up-to-date medical understandings, 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.²² While gender identity disorder was pathologized as an all-encompassing mental illness, gender dysphoria is understood as a condition that is amenable to treatment.²³ And mental health professionals agree that not all transgender individuals suffer from dysphoria. In addition, 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."²⁴

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.²⁵ WGCSDSH members wrote recently that "there are individuals who today present for gender reassignment who may be neither distressed nor impaired."²⁶ The high reported rates of distress among transgender veterans and service members have been based on clinical samples that overrepresented patients requiring psychological care. In addition, 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 seventy-nine 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." Satisfaction rates have increased over time: "studies have been reporting a steady improvement in outcomes as the field becomes more advanced."²⁷

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. Defense Department rules categorically ban all recruits who have a "learning, psychiatric, and behavioral" condition such as a "current or history of psychosexual conditions, including but not limited to transsexualism," as well as all currently serving personnel with a "sexual gender and identity disorder," regardless of whether the individual in question is fit for duty or suffers from any mental distress. By contrast, Defense Department regulations governing many other psychological conditions carefully 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. 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. Thus, individuals with attention deficit hyperactivity disorder are prohibited from enlisting unless they meet a number of criteria, including documenting that they maintained a 2.0 grade point average after the age of fourteen, and individuals with simple phobias are banned from enlisting unless they meet other criteria, including documenting that they have not required medication for the past twenty-four 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. 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.²⁸ 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.”²⁹ 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 percent of these servicemembers were diagnosed with more than one mental disorder.”³⁰ 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, through April 30, 2005, received waivers.³¹

While regulations are intended to prevent individuals with significant psychological impairments from serving, the regulations themselves pose significant obstacles to the well-being of some troops. Current restrictions discourage transgender individuals from getting the care they need, exacerbating symptoms and in some cases leading to dependence on alcohol or drugs.³² And, research has also shown that policies that force individuals to conceal their identities can have significant mental health consequences.³³ 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.”³⁴

Cross-sex Hormone Treatment

Military representatives cited previously have indicated that cross-sex hormone treatment is too risky and complicated for medical personnel to administer and

monitor. Our argument, by contrast, is that the risks associated with cross-sex hormone treatment are low and that despite various restrictions that prohibit military members from seeking medical treatments, the military's unwillingness to allow any transgender service members to undergo cross-sex hormone therapy is inconsistent with the fact that many non-transgender personnel are permitted to take hormones.³⁵

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 (antiandrogen therapy) and simultaneously produce feminizing effects (estrogen therapy). 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. Most effects take place beginning at eight weeks and maximize at about two years and vary depending on age and genetic makeup.

Despite some mild risks associated with cross-sex hormone therapy, over fifty 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.³⁶ 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.³⁷ Clinics with a high volume of transgender patients on estrogen therapy report having "rarely seen adverse effects."³⁸

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, the military lists several gynecological conditions (dysmenorrhea, endometriosis, menopausal syndrome, chronic pelvic pain, hysterectomy, or oophorectomy) as requiring 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 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 percent (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.³⁹ According to Defense Department deployment policy, “There are few medications that are inherently disqualifying for deployment.”⁴⁰ 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.”⁴¹ 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.”⁴² The Military Health Service maintains a sophisticated and effective system for distributing prescription medications to deployed service members worldwide.⁴³

Gender-confirming Surgery

According to the official policies of the American Medical Association, American Psychological Association, Endocrine Society, and World Professional Association for Transgender Health, gender-confirming surgeries can be medically necessary for some transgender individuals to mitigate distress associated with gender dysphoria.⁴⁴ Surgeries may include chest reconstruction and surgeries to create testes (scrotoplasty) and penises (phalloplasty or metoidioplasty, with or without urethral lengthening) for FTMs, and facial feminization, breast augmentation and surgeries to remove testes (orchiectomy) and create vaginas (vaginoplasty) for MTFs. 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.”⁴⁵

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 postoperative complications that can be more serious than those of medically necessary gender-confirming surgeries.⁴⁶ 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.⁴⁷ 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.⁴⁸ 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.⁴⁹ A recent study reported the average cost of transition-related health care at US\$29,929.⁵⁰

As with any surgical procedures, gender-confirming surgeries entail a risk of short-term and chronic postoperative complications.⁵¹ Yet, despite the presence of risk, research shows that the complications rate is low. Across fifteen 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.⁵² A follow-up study of eighty women who had vaginoplasties found three postoperative complications and another determined that among eighty-nine vaginoplasties, there was one major complication.⁵³ If transgender service members were allowed to serve and to have gender-confirming surgery while in the military, we estimate that ongoing postoperative complications would render ten MTF service members unfit for duty each year.⁵⁴

Research suggests that a minority of individuals having FTM genital surgery may expect long-term complications that would require ongoing care.⁵⁵ Yet, very few FTMs have genital surgery, and of the 1,594 FTMs who responded to a recent survey, only forty-eight individuals (3 percent) had genital surgery, including twenty-four who had metoidioplasty and phalloplasty, one who had just phalloplasty, and twenty-three who had just metoidioplasty.⁵⁶ Given such low demand, even using conservative assumptions, it is estimated that only six postoperative FTM transgender men would become unfit for duty each year as a result of ongoing, postoperative complications following genital surgery.⁵⁷

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.

Deployment

In explaining the rationale for the military's ban on transgender service, spokespersons have emphasized non-deployability, medical readiness, and constraints on fitness for duty.⁵⁸ While personnel policy must 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 article, 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. With two exceptions, all transgender service members who are otherwise fit would be as deployable as their non-transgender peers. The first exception is postoperative transgender service members whose genital surgeries result in long-term complications. Using conservative assumptions, an estimated maximum of sixteen postoperative service members (ten MTF transgender women and six FTM transgender men) would become permanently undeployable each year as a result of ongoing postoperative medical complications following genital surgery.

The second exception would be those undergoing surgical transition while in service. But as discussed, 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. Thus, 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 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."⁵⁹ 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.”⁶⁰

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.” 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. 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.”⁶¹

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 for a variety of reasons during the twelve-month period prior to the survey’s administration, including 22.5 percent of Marines.⁶² Yet, non-deployable service members (who are not transgender) 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 thirty days of paid leave per year (generally referred to as “ordinary” or “annual” leave), accruing at a rate of 2½ days per month.⁶³ 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.⁶⁴ 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.”⁶⁵

Service members may also be granted special leave on top of their ordinary leave. This leave is in addition to the thirty days per year provided for by federal law and is not counted against the member’s ordinary leave balance. And 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, and the absence is not counted against the member's leave balance.⁶⁶

Military convalescent leave policy does not discriminate against elective procedures such as Botox treatments and "plastic surgery for unacceptable cosmetic appearance."⁶⁷ 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."⁶⁸ 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 twelve months.⁶⁹ 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.⁷⁰

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. Despite concerns expressed by those such as the judge in the 1981 *Alexander* case, 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 and would normally last less than the twelve months allowed for deferrals of reassignment. 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.⁷¹

Conclusion

Medical standards are designed to ensure that service members are free of conditions that would interfere with performance or burden the military. Current regulations, however, bar the service of transgender individuals regardless of ability to perform or degree of medical risk. 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. Unlike other medical disqualifications, however, which are based on the latest medical expertise and military experience, it is the transgender bar itself that is inconsistent with current medical understanding and is based on standards that are decades out-of-date.

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

Simply treating transgender service members in accordance with established medical practices and standards, as it does with the provision of all medical care, is all that's needed to end the unnecessary and harmful policy of discrimination against transgender service. While no new medical rules are needed, the Defense Department could look to foreign military experiences as it formulates administrative guidance to address fitness testing, records and identification, uniforms, housing, and privacy. As mentioned previously, at least eighteen countries allow transgender personnel to serve. Foreign military regulations that apply to transgender military service are straightforward, sensible, and fair, offering a sound model for US military policy. In light of the research presented here, taking these steps to reform current military policy governing transgender service would improve care for US service members without burdening the military's pursuit of its vital missions.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The Palm Center, a research initiative of the Political Science Department of San Francisco State University, provided research funding for this project.

Notes

1. In an earlier, self-published version of this article, we referred to twelve countries that allow transgender military service. Since that time, scholars at the Hague Centre for Strategic Studies have published a comprehensive study of rules governing gay, lesbian, bisexual, and transgender service in 103 countries. While the report does not include a list of nations allowing transgender military service, we are grateful to its authors, who provided us with their data indicating that 18 nations allow transgender military service while 9 nations probably allow it, but could not be confirmed. The 18 confirmed cases are Australia, Austria, Belgium, Bolivia, Canada, Czech Republic, Denmark, Estonia, Finland, France, Germany, Israel, Netherlands, New Zealand, Norway, Spain, Sweden, and United Kingdom. See Joshua Polchar et al., *LGBT Military Personnel: A Strategic Vision for Inclusion* (The Hague, the Netherlands: The Hague Centre for Strategic Studies, 2014).
2. Aaron Belkin et al., "Readiness and DADT Repeal: Has the New Policy of Open Service Undermined the Military?," *Armed Forces & Society* 39, 4 (2013): 587-601; Robert

- MacCoun, Elizabeth Kier, and Aaron Belkin, "Does Social Cohesion Determine Motivation in Combat? An Old Question with an Old Answer," *Armed Forces & Society* 32, 4 (2006): 646-54.
3. Veterans Health Administration (VHA) updated the policy in 2013. See Department of Veterans Affairs, VHA Directive 2013-003, *Providing Health Care for Transgender and Intersex Veterans*, February 8, 2013. The VHA provides cross-sex hormone therapy, but not gender-confirming surgery.
 4. In this article, we do not address cross-dressing, which is governed by grooming and uniform regulations that are distinct from the medical rules that apply to transgender military service.
 5. For most people, gender identity is a stable, deep-seated component of their sense of self. For a broader discussion of gender identity, see Jaime M. Grant, Lisa A. Mottet, and Justin Tanis, *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, 2011), 24-25.
 6. Although fewer than 20 percent of transgender women and 5 percent of transgender men have had genital reconstructive surgeries, more have had other types of gender-confirming surgery such as breast augmentation, and demand for surgeries could increase if they were affordable and available. Grant, Mottet, and Tanis, *Injustice at Every Turn*, 78-79.
 7. See, for example, durations associated with variants of cross-sex hormone therapy in Eli Coleman et al., "Standards of Care for the Health of Transsexual, Transgender, and Gender-nonconforming People, Version 7," *International Journal of Transgenderism* 13, 4 (2011): 188-89.
 8. Gary Gates and Jody Herman, *Transgender Military Service in the United States* (Los Angeles, CA: Williams Institute, 2014), accessed July 18, 2014, <http://williamsinstitute.law.ucla.edu/wp-content/uploads/Transgender-Military-Service-May-2014.pdf>. At the time of writing, the active, Guard and Reserve components included 2,280,875 personnel.
 9. In response to a recent Freedom of Information Act request for discharge data submitted by the Palm Center, a Pentagon spokesperson said that the military does not track the number of service members who have been separated for transgender-related reasons.
 10. Private communication between staff of Sparta, an organization representing currently serving transgender service members, and Palm Center research staff.
 11. 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. Paraphilia is sexual arousal to an atypical object. See American Psychiatric Association, *Diagnostic and Statistical Manual*, 5th ed. (Arlington, VA: American Psychiatric Publishing, 2013).
 12. Department of Defense Instruction (DODI) 1332.14, *Enlisted Administrative Separations*, August 28, 2008, Incorporating Change 3, September 30, 2011, Enclosure 3, at ¶ 3(a)8. DODI 1332.14 incorporates a list of administratively disqualifying conditions, including sexual gender and identity disorders, found in Enclosure 5 to DODI 1332.38,

- Physical Disability Evaluation*, November 14, 1996, Incorporating Change 2, April 10, 2013.
13. Department of Defense Instruction 6130.03, *Medical Standards for Appointment*, Enclosure 2, at ¶ 3(b).
 14. Army Regulation 40-501, *Standards of Medical Fitness*, December 14, 2007 (updated August 4, 2011), at ¶ 1-6(b).
 15. AR 40-501, *Standards of Medical Fitness*, at ¶ 1-6(h).
 16. See AR 40-501, *Standards of Medical Fitness* ¶¶ 2-14, 3-35(a), (b); NAVMED P-117, U. S. Navy Manual of the Medical Department, Chapter 15, §§ 15-45, 15-46, 15-58; SECNAV Instruction 1850.4E, Department of the Navy Disability Evaluation Manual, Enclosure 8, § 8013(a); SECNAV Instruction 1850.4E, Enclosure 8, Attachment (b) (page 8-43); and NAVMED P-117, Chapter 18, § 18-5(3).
 17. *Doe v. Alexander*, 510 F. Supp. 900 (D. Minn. 1981); *Leyland v. Orr*, 828 F. 2d 584 (9th Cir. 1987); *DeGroat v. Townsend*, 495 F. Supp. 2d 845 (S.D. Ohio 2007).
 18. We consider deployability to be a medical aspect of military service because deployment regulations specifically address medical readiness. See, for example, DODI 6490.07, *Deployment-Limiting Medical Conditions for Service Members and DOD Civilian Employees*, February 5, 2010; or Department of Defense, Assistant Secretary of Defense for Health Affairs Memorandum, *Policy Guidance for Deployment-Limiting Psychiatric Conditions and Medications*. (Washington, DC: Department of Defense, November 7, 2006).
 19. Jillian C. Shipherd et al., "Male-to-female Transgender Veterans and VA Health Care Utilization," *International Journal of Sexual Health* 24, 1 (2012): 85.
 20. Jack Harrison-Quintana and Jody L. Herman, "Still Serving in Silence: Transgender Service Members and Veterans in the National Transgender Discrimination Survey," *LGBTQ Policy Journal at the Harvard Kennedy School* 3, accessed July 18, 2014, <http://williamsinstitute.law.ucla.edu/wp-content/uploads/Harrison-Quintana-Herman-LGBTQ-Policy-Journal-2013.pdf>; Everett McDuffie and George R. Brown, "Seventy U.S. Veterans with Gender Identity Disturbances: A Descriptive Study," *International Journal of Transgenderism* 12, 1 (2010): 21-30.
 21. Department of Defense Instruction 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. Department of Defense translates *DSM-IV* diagnoses to the closest ICD code.
 22. 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 Coleman et al., "Standards of Care for the Health of Transsexual, Transgender, and Gender-nonconforming People, Version 7," 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.

23. Coleman et al., "Standards of Care for the Health of Transsexual, Transgender, and Gender-nonconforming People, Version 7," 168.
24. Jack Drescher, Peggy Cohen-Kettenis, and Sam Winter, "Minding the Body: Situating Gender Identity Diagnoses in the ICD-11," *International Review of Psychiatry* 24, 6 (2012): 575, 569, 574.
25. Ilan H. Meyer and Mary E. Northridge, eds., *The Health of Sexual Minorities: Public Health Perspectives on Lesbian, Gay, Bisexual and Transgender Populations* (New York: Springer, 2007).
26. Drescher, Cohen-Kettenis, and Winter, "Minding the Body," 573.
27. Coleman et al., "Standards of Care for the Health of Transsexual, Transgender, and Gender-nonconforming People, Version 7," 230, citing findings of multiple studies including Richard Green and Davis Fleming, "Transsexual Surgery Follow-up: Status in the 1990s," *Annual Review of Sex Research* 1, 1 (1990): 163-74. See Coleman et al. for additional references.
28. Anne Gaderman et al., "Prevalence of DSM-IV Major Depression Among U.S. Military Personnel," *Military Medicine* 177, 8 (2012): 47-59.
29. Kim Murphy, "A Fog of Drugs and War," *Los Angeles Times*, April 7, 2012, accessed July 18, 2014, <http://articles.latimes.com/2012/apr/07/nation/la-na-army-medication-20120408>.
30. Katherine Blakeley and Don J. Jansen, *Post-traumatic Stress Disorder and Other Mental Health Problems in the Military: Oversight Issues for Congress* (Washington, DC: Congressional Research Service, 2013), 2, citing "Mental Disorders and Mental Health Problems, Active Component, US Armed Forces, 2000-2011," *Medical Surveillance Monthly Report* 19, 6 (June 2012): 11-17.
31. Paul R. Sackett and Anne S. Mavor, eds., *Assessing Fitness for Military Enlistment Physical, Medical, and Mental Health Standards* (Washington, DC: The National Academies Press, 2006), 144.
32. Adam F. Yerke and Valory Mitchell, "Transgender People in the Military: Don't Ask? Don't Tell? Don't Enlist!," *Journal of Homosexuality* 60, 2-3 (2013): 445. Also see Drescher, Cohen-Kettenis, and Winter, "Minding the Body," 573.
33. Meyer and Northridge, *The Health of Sexual Minorities*, 2007.
34. Ministry of Defence, *Policy for the Recruitment and Management of Transsexual Personnel in the Armed Forces* (London, UK: Ministry of Defence, January 2009).
35. Although service members are not prohibited explicitly from obtaining cross-sex hormone treatment, 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.
36. H. Asscheman et al., "A Long-term Follow-up Study of Mortality in Transsexuals Receiving Treatment with Cross-sex Hormones," *European Journal of Endocrinology* 164, 4 (2011): 635-42; Paul Van Kesteren et al., "Mortality and Morbidity in Transsexual Subjects Treated with Cross-sex Hormones," *Clinical Endocrinology* 47, 3 (1997): 337-43; M. Colizzi, R. Costa, and O. Todarello, "Transsexual Patients' Psychiatric Comorbidity and Positive Effect of Cross-sex Hormonal Treatment on Mental Health: Results from a Longitudinal Study," *Psychoneuroendocrinology* 39 (2014): 65-73.

37. H. Asscheman et al., "Venous Thrombo-embolism as a Complication of Cross-sex Hormone Treatment of Male-to-Female Transsexual Subjects: A Review," *Andrologia*, August 14, 2013. doi: 10.1111/and.12150.
38. Tom Waddell Health Center, *Protocols for Hormonal Reassignment of Gender*, 2006, accessed November 6, 2013, <http://www.sfdph.org/dph/comupg/oservices/medSvs/hlthCtrs/TransGendprotocols122006.pdf>.
39. Department of Defense, *Health Related Behaviors Survey of Active Duty Military Personnel 2011* (Washington, DC: Department of Defense, 2013), 119-20, 130-31, 248, 264-65.
40. Department of Defense, *Policy Guidance for Deployment-limiting Psychiatric Conditions and Medications* (Washington, DC: Department of Defense, 2006) at ¶ 4.2.3.
41. Andrew Tilghman, "'Any Soldier Can Deploy on Anything': Pentagon Rules Bar Some Drugs from Combat Zone, but Oversight Is Suspect," *Army Times*, March 17, 2010, accessed July 18, 2014, <http://www.armytimes.com/article/20100317/NEWS/3170310/-8216-Any-soldier-can-deploy-anything->.
42. Tilghman, "Any Soldier Can Deploy on Anything," 2010.
43. Department of the Army, *Personnel Policy Guidance for Overseas Contingency Operations* (Washington, DC: Department of the Army, 2009), at ¶ 7-13(b)1.
44. See, for example, American Medical Association, Resolution 122 (A-08), 2008, accessed July 18, 2014, http://www.tgender.net/taw/ama_resolutions.pdf.
45. Coleman et al., "Standards of Care for the Health of Transsexual, Transgender, and Gender-nonconforming People, Version 7," 170-71.
46. For a list of 313 allowable, elective cosmetic procedures, see Tricare Management Activity, Uniform Business Office, *Provider's Guide to the Elective Cosmetic Surgery Superbill*. (Falls Church, VA: TRICARE Management Activity, Uniform Business Office, 2013).
47. 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, "Complications of Orthognathic Surgery," *Journal of Craniofacial Surgery* 18, 4 (2007): 975-85. The military allows personnel to have elective cosmetic surgeries on a space-available basis and at their own expense.
48. Patel, Morris, and Gassman, "Complications of Orthognathic Surgery," 2007; F. Kramer et al., "Intra- and Perioperative Complications of the LeFort I Osteotomy: A Prospective Evaluation of 1000 Patients," *Journal of Craniofacial Surgery* 15, 6 (2004): 971-77; K. Jones, "Le Fort II and Le Fort III Osteotomies for Midface Reconstruction and Considerations for Internal Fixation," in *Craniofacial Reconstructive and Corrective Bone Surgery*, eds. A. Greenberg and J. Prein (New York: Springer, 2006), 667-68.
49. 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 $0.044 \times 2,281 = 100$ 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 percent military as compared to 0.3 percent of the civilian adult population), and so the figure of 100 claimants per year should be adjusted upward by $.68/.3 = 2.3 \times$. Hence, if the military paid for transition-related surgery, one would expect $2.3 \times 100 = 230$ claims per year. See Jody L. Herman, *Costs and Benefits of Providing Transition-related Health Care Coverage in Employee Health Benefits Plans* (Los Angeles, CA: Williams Institute, 2013).

50. Herman, *Costs and Benefits of Providing Transition-related Health Care Coverage in Employee Health Benefits Plans*, 6.
51. 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.
52. A. A. Lawrence, "Patient-reported Complications and Functional Outcomes of Male-to-female Sex Reassignment Surgery," *Archives of Sexual Behavior* 35, 6 (2006): 717-27.
53. Cameron Bowman and Joshua M. Goldberg, "Care of the Patient Undergoing Sex Reassignment Surgery," *International Journal of Transgenderism* 9, 3-4 (2006): 135-65; Miroslav L. Djordjevic, Dusan S. Stanojevic, and Marta R. Bizic, "Rectosigmoid Vaginoplasty: Clinical Experience and Outcomes in 86 Cases," *Journal of Sexual Medicine* 8, 12 (2011): 3487-94; Ji-Xiang Wu et al., "Laparoscopic Vaginal Reconstruction Using an Ileal Segment," *International Journal of Gynecology and Obstetrics* 107, 3 (2009): 258-61; L. Jarolím et al., "Gender Reassignment Surgery in Male-to-female Transsexualism: A Retrospective 3-month Follow-up Study with Anatomical Remarks," *Journal of Sexual Medicine* 6, 6 (2009): 1635-44; S. V. Perovic, D. S. Stanojevic, and M. L. J. Djordjevic, "Vaginoplasty in Male Transsexuals Using Penile Skin and a Urethral Flap," *BJU International* 86, 7 (2000): 843-50.
54. Presumably, any postoperative 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 postoperative 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 postoperative complications, this would mean that ten MTF transgender troops would become permanently unfit for duty each year.
55. For example, see S. Baumeister et al., "Phalloplasty in Female-to-male Transsexuals: Experience from 259 Cases [Article in German]," *Handchir Mikrochir Plast Chir* 43, 4 (2011): 215-21; J. E. Terrier et al., "Surgical Outcomes and Patients' Satisfaction with Suprapubic Phalloplasty," *Journal of Sexual Medicine* 11, 1 (September 12, 2013):

- 288-98; P. A. Sutcliffe et al., "Evaluation of Surgical Procedures for Sex Reassignment: A Systematic Review," *Journal of Plastic, Reconstructive and Aesthetic Surgery* 62, 3 (2009): 294-306.
56. These figures are derived from raw data that informed Grant, Mottet, and Tanis, *Injustice at Every Turn*, 2011.
 57. Presumably, any postoperative 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 postoperative 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 postoperative complications, this would mean that six FTM transgender troops would become permanently unfit for duty each year.
 58. Chris Johnson, "Pentagon's Gay-inclusive Human Goals Charter Omits Trans People," *Washington Blade*, April 28, 2014, accessed July 18, 2014, <http://www.washingtonblade.com/2014/04/28/pentagons-gay-inclusive-human-rights-charter-omits-trans-people/>.
 59. Department of the Army, *Personnel Policy Guidance for Overseas Contingency Operations*, 2009, 7-9(e).
 60. Ministry of Defence, *Policy for the Recruitment and Management of Transsexual Personnel in the Armed Forces*, 2009.
 61. DODI 1332.38, *Physical Disability Evaluation*, Enclosure 3, at ¶¶ P3.4.1.3, P3.4.3, and Enclosure 4, at ¶ 1.1.2.
 62. Department of Defense, *Health Related Behaviors Survey of Active Duty Military Personnel 2011*, 2013.
 63. United States Code, Title 10, Section 701(a).
 64. 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.
 65. DODI 1327.06, *Leave and Liberty Policy*, Enclosure 2, at ¶¶ 1j(1), 1a.
 66. Army Regulation 600-8-10, *Leave and Passes* (August 4, 2011 revision), at ¶ 5-3e.
 67. 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).
 68. Army Medical Command, *Revised Policy for Cosmetic Surgery*, at ¶ 5(e)(7).
 69. See, for example, Department of the Air Force Instruction 36-2110, *Assignments* (Change 2, June 8, 2012), at ¶ 2.17.1.
 70. Department of the Air Force Instruction 36-2110, *Assignments*, at ¶ 2.17.3 and table 2.2.
 71. DODI 1332.38, *Physical Disability Evaluation*, Enclosure 3, at ¶ P7.3.

Author Biographies

M. Joycelyn Elders was appointed the sixteenth surgeon general of the United States by President Clinton in 1993 and was the second woman to head the US

Public Health Service. After high school, she earned a scholarship to the all-black liberal arts Philander Smith College in Little Rock. She then 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. She 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, she combined her clinical practice with research in pediatric endocrinology, publishing well over a hundred articles, most dealing with problems of growth and juvenile diabetes. She 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.

George R. Brown is an 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, 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. He served as chief of psychiatry at Mountain Home VAMC for eighteen years and served twelve years in the US Air Force as a psychiatrist. He 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 twenty-two book chapters, many of which have been on transgender health care issues. He has presented his work on transgender issues at one-third of the medical schools in the United States as well as in seven nations. He 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.

Eli Coleman is the 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. He has authored articles and books on a variety of sexual health topics, including compulsive sexual behavior, sexual orientation, and gender dysphoria. He is the 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, 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 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. 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.

Thomas A. Kolditz is a professor in the Practice of Leadership and Management and director of the Leadership Development Program at the Yale School of Management. A professor emeritus at the US Military Academy, he led the Department of Behavioral Sciences and Leadership at West Point for twelve years. 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 is also the managing member of Saxon Castle LLC, a leader development consultancy. 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. His most recent book is *In Extremis Leadership: Leading as if Your Life Depended on It*. In 2009, he was named to the Council of Senior Advisors, Future of Executive Development Forum.

Alan M. Steinman was first commissioned in the United States Public Health Service as a lieutenant in July 1972 and served in a number of senior medical officer capacities at the USCG. In 1993, he was selected for promotion to flag officer for the position of Director of Health and Safety at USCG HQ. Steinman retired from the Coast Guard and the Public Health Service in 1997. His educational degrees include a Bachelor of Science from the Massachusetts Institute of Technology, a Doctor of Medicine from the Stanford University School of Medicine, and a Master of Public Health from the University of Washington. He also graduated from the US Navy School of Aerospace Medicine. He is board certified in Occupational Medicine and is a Fellow of the American College of Preventive Medicine. 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 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. For the past five years, he has lectured to college classes on Joint Base Lewis-McChord on the issue of gays and lesbians in the military.