

Serving Those Who Serve?

Access to IVF for Servicemembers and Veterans

August 2020

Servicemembers and veterans appear to face high rates of infertility. Unfortunately, limited information, restrictive laws and policies, high cost, and other barriers put the infertility care they need, including IVF, out of reach for many.

INTRODUCTION

This issue brief is the third in a series discussing the unique barriers servicemembers, veterans, and their dependents face in accessing reproductive health services.

In this issue brief, we examine access to in vitro fertilization (IVF) for servicemembers and veterans, who face unique barriers to care. First, we provide background on infertility, including clinical and social infertility, and racial disparities in incidence rates and access to care. In this section we also discuss infertility care, including IVF, as an important aspect of comprehensive health care and key to ensuring access to the full spectrum of reproductive rights. Second, we provide background on infertility among servicemembers and veterans, in particular with regard to female infertility, where significant research and knowledge gaps persist. Third, we discuss barriers to IVF services, including legal restrictions on insurance coverage, cost barriers, and logistical and systemic barriers to care. Finally, we offer policy recommendations for ensuring equitable access to infertility care, including IVF, for servicemembers, veterans, and their dependents.

To learn about infertility in the United States and disparities in incidence rates and access to care more generally, see <u>Infertility and IVF Access in the United States:</u>
A Human Rights-Based Policy Approach.

BACKGROUND

Human Rights Implicated

Infertility implicates multiple human rights, including a person's right to health, to make decisions about their reproductive life like whether and when to have children, to benefit from scientific progress, to equality and non-discrimination, and to informed consent. To recognize and address these rights, laws and policies should ensure that people impacted by infertility, including servicemembers and veterans, have access to information about and can access infertility care, including IVF, without discrimination.

Infertility Prevalence

Clinical infertility is a globally recognized public health concern. An estimated 15 percent of couples worldwide are impacted by clinical infertility. In the U.S., millions of people are impacted by clinical infertility. Data from the Centers for Disease Control and Prevention (CDC) National Survey of Family Growth 2015-2017, the most recent survey on this subject, reported that 8.8 percent of married women in the United States aged 15-49 were infertile.2 Data from the same survey revealed that 9.4 percent of women aged 15-44 and 12 percent of men aged 25-44 reported some form of infertility.3 Indeed, male infertility affects approximately 50



Issue Brief

percent of infertile couples and about 30 percent of those couples only have male factor as the cause of primary infertility.*,4 Fertility declines with age for both men and women, but women's fertility declines more precipitously after age 35.5 These numbers do not account for individuals and couples impacted by social infertility.

Infertility is often exclusively understood as clinical, and describes the physiological conditions underlying the inability to reproduce following one year of unprotected sexual intercourse. Clinical infertility assumes that a person is engaging in procreative sex with their partner. Social or situational infertility captures infertility based on the inability to reproduce via sexual intercourse due to social factors such as an individual's sexual orientation or lack of a partner. A more inclusive definition of infertility that recognizes both clinical and social infertility was developed in 2017 following work by a global panel of experts, professional organizations, and patient representatives. 6 The CDC has not yet adopted this definition. Doing so would provide greater clarity regarding the scale of infertility incidence in the United States.

Deeply entrenched racial and ethnic disparities in health outcomes disproportionately affect Black and Indigenous women of all socioeconomic backgrounds, including in rates of clinical infertility. CDC data from 2006-2010 reveal that non-Hispanic Black women were nearly twice as likely to be diagnosed as infertile than Hispanic or non-Hispanic white women. An analysis of data

*The World Health Organization (WHO) distinguishes between primary infertility where a person has not previously had a pregnancy and live birth, and secondary infertility, where a person has already had at least one pregnancy and live birth. Based on its estimates, secondary infertility impacts more women globally than primary infertility. For the purposes of this issue brief, infertility refers to both primary and secondary clinical infertility unless discussing social infertility.

collected by the CDC between 2002 and 2013 also showed higher rates of infertility among Black and American Indian/Alaska Native respondents compared to non-Hispanic white respondents.⁹

Racial disparities in rates of infertility incidence have also been reported in the military, where female recruits have historically been more diverse than both the general population and male recruits. As of 2020, 43 percent of male and 56 percent of female servicemembers are Hispanic or a racial minority. Among the 1.6 million women who are veterans, 65 percent are white, non-Hispanic, 20 percent are Black, nine percent are Latina, three percent Asian American Pacific Islander, and one percent Native American. 12

Infertility care

The most common form of assisted reproductive technology (ART) in the United States is in vitro fertilization (IVF).** Almost two percent of annual births in the United States are a result of IVF¹³ and 99 percent of all ART procedures in the United States utilize IVF.¹⁴ A typical, two-week IVF cycle consists of the following steps:

- Stimulation of the ovaries using fertility medications (ovulation induction);
- 2. Egg retrieval, which is the surgical removal of eggs from the ovaries;
- 3. Fertilization of the retrieved eggs with sperm in the laboratory (IVF); and
- 4. Transfer of the most viable embryos into the uterus.¹⁵
- **Assisted reproductive technologies include all infertility treatments that involve the handling of eggs and sperm and/or embryos. Popular methods of ART include IVF and frozen embryo transfers. ART do not include treatments in which only sperm is handled, as in intrauterine insemination (IUI). They also do not include treatment in which a patient takes hormonal medication to stimulate egg production (OI).

This two-week timeline does not include the time required for patient evaluations and informed consent conversations that happen prior to ovulation induction, or the time after embryo transfer waiting to confirm a pregnancy. Data from 2018 shows that only approximately 30 percent of first-time IVF cycles where the patient was under 35 years of age and used their own egg(s) resulted in a live birth. For women over age 35, the likelihood of requiring several IVF treatment cycles to achieve a successful pregnancy increases substantially. This may require repeating several or all four steps in a cycle.

The use of ART has increased significantly since the birth of the first infant in the U.S. using IVF in 1981.18 Notably, so has the out-of-pocket cost of such technologies. The average cost of a single IVF cycle in the United States is over \$20,000 when including necessary medications and tests.19 The chances of live birth increase with each cumulative IVF cycle and some health agencies recommend that insurance policies cover at least three IVF cycles to maximize cost and clinical efficiency.20 Multiple cycles result in increased costs, forcing some people to consider taking out loans, turning to crowdfunding platforms, getting treatments in other countries with lower costs, or moving to states with IVF insurance mandates.21 Women who have insurance coverage for IVF are more likely to have a successful live birth because they continue to access care over multiple cycles, versus women who pay out of pocket and can only afford one cycle.22 High out-of-pocket costs can lead women to discontinue IVF care after one unsuccessful IVF cycle.23 Women without insurance, in particular, are three times more likely than women with insurance to discontinue infertility services after one round.24

While neither intrauterine insemination (IUI)*** nor ovulation induction (OI) are categorized as methods of ART, they are also commonly used methods of infertility care in the United States. The success rate of IUI ranges between 20-50 percent over multiple cycles and is often the first intervention infertile patients use to become pregnant before moving on to more invasive and expensive procedures, such as IVF.²⁵ Ovulation induction can be used in conjunction with IUI or IVF for people experiencing irregular menstrual cycles or unexplained infertility.²⁶

Mental health care is also increasingly recognized as an essential part of infertility care, as infertility and pregnancy loss can be a heavy emotional burden. One study found that women impacted by infertility felt as anxious or depressed as those diagnosed with cancer, hypertension, or those recovering from a heart attack.²⁷ Psychologists are seeing an increase in patients dealing with the mental trauma of infertility, with one psychologist characterizing it as an "invisible loss" because of the stigma and silence surrounding the inability to conceive.²⁸

INFERTILITY INCIDENCE AMONG SERVICEMEMBERS AND VETERANS

While research on infertility incidence and access to infertility care use in the United States is limited, there is even less data available for the military community. However, a recent study by the Service Women's Action Network (SWAN), which surveyed 799 female servicemembers and veterans, revealed that 37 percent of respondents struggled with infertility—over three times higher than the national average. While this is not a nationally representative survey, it nevertheless indicates that infertility is of increasing

***IUI is a method of infertility care whereby sperm is transferred directly into a person's uterus to facilitate fertilization. concern among servicemembers and veterans, particularly as the number of female recruits continues to grow.³⁰ In another survey involving over 20,000 veterans who served in the military between 2001 and 2008, respondents of both genders reported that they had experienced infertility at rates higher than the general U.S. population.³¹

A Military Health Services report attempts to counter this narrative, but its conclusions may not paint a full picture.32 The report estimates that only 1.6 percent of "active component women of childbearing age" were diagnosed with clinical infertility, and concludes that the rate of infertility among servicemembers is far lower than the rate of self-reported infertility represented in both the SWAN report (37 percent) and the general population (6.7 percent).33 However, in doing so, the report compares the rate of diagnosed clinical infertility cases in the military to those of self-reported infertility in the SWAN report and in the general U.S. population.34 Such a comparison is misleading, however, because the rate of diagnosed infertility is inherently underinclusive as it ignores people who experience infertility but are unable to access care or obtain a formal diagnosis. As anecdotal evidence collected in the SWAN survey shows, many female servicemembers and veterans who struggled to become pregnant wanted to seek out or attempted to seek out medical care but faced substantial barriers.

The report also addresses only clinical infertility, thereby disregarding service-members whose social infertility is based on circumstances such as their relationship status or sexual orientation. An estimated 16 percent of female servicemembers and four percent of male servicemembers identify as lesbian, gay, or bisexual. 35 Additionally, unmarried servicemembers represent approximately 43 percent of active duty servicemembers, 52 percent of

National Guard and Reserve members, and 40 percent of veterans.³⁶ As will be further explored below, current restrictions on infertility coverage limit access to infertility care for these groups and a number of servicemembers and veterans have been denied services because their infertility was not clinical.

Risk factors related to military service may affect infertility incidence rates for servicemembers and veterans

Many servicemembers are exposed to jobrelated risk factors that can cause infertility or are linked to a greater risk of infertility. While more research is needed to obtain reliable data, it is likely that exposure to these risk factors results in higher infertility rates among servicemembers and veterans. For example, soldiers deployed in combat areas may experience servicerelated injuries that render them infertile. Combat-related injuries that adversely impact fertility include spine/spinal cord and head injuries, which particularly affect male fertility, and genital/pelvic trauma, which may affect fertility in both men and women.³⁷ Women who are deployed in combat zones often are also exposed to an additional risk factor most men are not: combat gear that is not designed for use by women. Ill-fitting combat gear can cause injuries, including injuries that could directly or indirectly affect fertility.38

Some military occupations may hold their own, unique risks. Exposure to toxic chemicals can harm the reproductive system and potentially cause infertility.³⁹ As a result, servicemembers who are exposed to harmful chemicals as an essential function of their jobs may be at substantially higher risk of infertility than other servicemembers or the civilian population at large. These include engineers handling solvents to clean or strip plane parts, servicemembers who specialize in

hazardous waste cleanup, or those who are exposed to contaminated water and burn pits during deployment. For example, one retired Army Officer reported that exposure to MEK—a liquid solvent used for cleaning or stripping of plane parts—caused the total loss of her ovaries at age 21. The military refused to provide her with IVF or other infertility care.⁴⁰

Other risk factors include sexual trauma and PTSD. While more research is needed on the link between military sexual trauma and infertility, researchers have shown that women in the military who report surviving attempted or completed sexual assault are more likely to also report a history of infertility.41 Likewise, although the relationship between psychological distress and infertility remains unclear, 42 there is a demonstrated correlation between post-traumatic stress disorder (PTSD) and female infertility.⁴³ The Department of Defense reports high numbers of sexual assault44 and estimates of PTSD rates among returning servicemembers vary, but may affect as many as 20-30 percent of all returning servicemembers.45

BARRIERS TO IVF FOR SERVICEMEMBERS AND VETERANS

Servicemembers and veterans are subject to numerous barriers to IVF services, including discriminatory restrictions on insurance coverage, the high cost of IVF services, and logistical and systemic barriers to care.

Legal restrictions on eligibility for insurance coverage

SERVICEMEMBERS

TRICARE, the insurance benefit plan for servicemembers and their dependents, restricts eligibility for infertility care, making access to care in the military health care system difficult for the vast majority of beneficiaries. While TRICARE beneficiaries include all military personnel and their dependents, including members of

the Army, Navy, Air Force, Marines, Coast Guard, and nonactive duty servicemembers such as the National Guard and Reserves, only certain active duty servicemembers are eligible for IVF coverage.

TRICARE covers medical care for the "diagnosis and treatment for an illness or injury of the male or female reproductive system" that may lead to infertility (e.g., reproductive cancers, hormonal disorders, and erectile dysfunction), but it does not cover methods of assisted reproductive technology, including IVF, outside a narrow set of circumstances. ⁴⁶ In April 2012, the Department of Defense began covering IVF services for "seriously or severely ill or injured" servicemembers via a memorandum. ⁴⁷ In order to be eligible, a member must:

- > be on active duty;
- > have experienced a serious illness or injury while on active duty;
- > have lost natural reproductive ability due to that illness or injury;
- > be able to provide their own genetic material to produce a pregnancy; and
- have a lawful spouse who can also provide their own genetic material.⁴⁸

An eligible servicemember or the lawful spouse of such a servicemember may receive up to three completed cycles of IVF from either a military treatment facility or a civilian provider, capped at six total cycles.⁴⁹

TRICARE's insurance coverage requirements discriminate against beneficiaries whose infertility is social, nonactive duty servicemembers, and dependents of servicemembers who receive their insurance coverage through TRICARE. They also exclude any beneficiaries who cannot prove that a service-connected illness or injury caused their clinical infertility, which is often difficult to prove unless it manifests as physical trauma to the reproductive organs.⁵⁰

"I applied to the VA for services and was initially denied because I am not legally wed to a male. I appealed and received approval for IUI but not IVF. My infertility is service connected and will likely require IVF but the VA and Congress do not care because I don't have a male spouse."

Army Officer, Veterani

VETERANS

Veterans face similar eligibility restrictions to accessing IVF. Veterans who receive an honorable discharge are eligible for health care benefits through the Veterans Health Administration ("VHA") system, which provides nearly all essential services at VHA facilities. 51 VHA is the country's largest integrated health care system, with more than 1,200 care locations serving nearly nine million veterans with essential health services each year.

The VHA medical benefits package specifically excludes coverage for IVF.52 However, pursuant to a provision first attached to the annual appropriations bill in 2016 and included every year since then, VHA currently funds IVF for a narrow subset of veterans. Under the provision, veterans who had a service-connected condition that led to their inability to procreate with their spouse without the use of infertility treatment are eligible for IVF.53 The VHA's eligibility requirements are designed to mirror those under TRICARE.54 As a result, single and unmarried veterans, those in same-sex marriages, and those who cannot prove a service-connected illness or injury remain ineligible for IVF services.

This drives non-eligible individuals from these groups to seek care from non-VA providers, where they face substantially higher out-of-pocket costs that are prohibitive to many.

Because the current provision is tied to the annual appropriations bill, the funding for even this narrow population of veterans is not permanent. It is limited to the current fiscal year and must be renewed by Congress with every appropriations cycle.

High out-of-pocket cost

High out-of-pocket costs for infertility care are a significant barrier that affects even those who are eligible for IVF treatment coverage. Individuals who qualify for TRICARE coverage and are able to access care still have to pay some amount of out-of-pocket costs, even with discounts offered due to their military status.55 For example, the cost of one IVF cycle at the Walter Reed ART Institute in Bethesda, Maryland for a covered, eligible individual ranges from \$4,800 to \$7,000.56 One Air Force member who became pregnant through IUI while on the waitlist for IVF services at Walter Reed found that even with the discounted services, her out-ofpocket costs were equivalent to going to a civilian provider because TRICARE did not cover all the necessary medication.57

Costs for service vary dramatically based on the specific military treatment facility's (MTF) contracts with civilian partners and regional cost differences. One Air Force Officer who received infertility care from both a MTF and a civilian provider noted that the quality of care and service at the MTF was not worth the amount of money she paid out-of-pocket.⁵⁸

Logistical and systemic barriers

Servicemembers and veterans face parallel logistical and systemic barriers that impede their access to care. Such barriers include limited availability of healthcare facilities that provide the needed care; excessive delays and wait times for appointments due to high demand and limited facilities; a perceived low quality of care; and inadequate and/or confusing referrals. In addition, servicemembers also face unique barriers because the nature of IVF care can impact their career trajectory.

LIMITED FACILITIES AND LONG WAIT TIMES

TRICARE beneficiaries may access care directly from the 723 MTFs, including 109 MTFs located overseas, 59 or they may use TRICARE to purchase care from civilian providers in the United States. 60 However, only six MTFs offer the full range of infertility services, including IVF, leading to limited access to care and long wait times. Specifically, related barriers include:

> Geographic limitations on access to care: Access to IVF is already limited by geography in the United States, with one study finding that nearly 40 percent of reproductive age women live in areas with zero or only one ART clinic.61 For servicemembers, the six MTFs offering the full range of infertility services are distributed across the country in Maryland, Hawai'i, North Carolina, Washington, Texas, and California.62 Some of these MTFs contract with civilian providers to provide care, which increases the travel costs and time needed to access care for servicemembers experiencing infertility. Many servicemembers may be stationed in locations that make these six MTFs or civilian ART clinics entirely inaccessible, especially while on active duty.

"[I'm] frustrated that infertility treatment is treated as an elective rather than a disease. After waiting months on IVF waitlist [...], I sought [a] second opinion through civilian provider. Both options are cost prohibitive to most."

Air Force Officer, Active Dutyⁱⁱ

"Frustrating!! My military OB/ GYN at my last base was trained to do IUI. We tried this option four times without success. [...] I feel disadvantaged because I'm not stationed in Hickam, San Antonio or the National Capital region where IVF could have been an option."

Air Force Officer, Active Dutyⁱⁱⁱ

"It has been frustrating receiving treatment for infertility through the military healthcare system. After receiving a diagnosis that required IVF in order to conceive, I was referred to a military treatment facility for IVF. I have been on a waitlist for IVF for over a year. Even getting an initial appointment took several months. The closest military treatment facility that offers IVF is three hours away, requiring me to take significant time off work to accomplish appointments."

Air Force Officer, Active Duty^{iv}

"The VA placed me on clomid for a year without trying to determine what could be the cause. When it didn't work, they wanted to do exploratory surgery. I said no and went to a respected fertility clinic who found on the first day the causes[...]. I became pregnant within a couple of months."

Air Force Officer, Veteran^v

- > Limited availability of appropriate specialists: For veterans, accessing care may also be difficult because not all VA-affiliated fertility centers are able to provide care for all infertility issues. The age of the individual and specific conditions causing infertility can determine which clinics can provide appropriate services.
- > Excessive wait times: Wait times are common and often run up to one year, which can be significant because the rate of successful live births decreases with age. 63 After waiting for a year on a waitlist, one member of the Air Force had to take significant time off from work because the nearest MTF was three hours away.64 Additionally, changes in location through deployment or changes of station can also disrupt, delay, or cancel infertility care. 65 One service member described the ART care team at one facility as "so over-regulated and overwhelmed that they must attempt to force everyone into cycles, they can't accommodate your schedule, and they don't do cutting-edge procedures."66 This service member eventually sought IVF services from a civilian clinic, which cost over \$30,000 in out-of-pocket fees.⁶⁷
- > Interruptions in access to care while transitioning to veterans' benefits:
 In addition to the significant waiting period patients experience in the military and VA health care systems, the transition from receiving care as a servicemember insured under TRICARE to receiving veterans' benefits is not seamless and continuity of infertility care is not guaranteed. For example, one Coast Guard veteran reported that she was forced to wait ten months after her retirement before she was able to access care with an infertility specialist again. 68

INCORRECT DIAGNOSES AND INADEQUATE REFERRALS

Both servicemembers and veterans have repeatedly reported receiving inadequate information and care at military and veterans' health care facilities. Such barriers include:

- > Failure to refer: One Navy servicemember reported that her request for
 a referral to see an infertility specialist
 was denied because she had not reached
 a threshold of three miscarriages—
 despite having actively tried and failed
 to conceive for four years. 69 Another
 servicemember reported, "I need IVF
 treatment[,] but the military would not
 provide it and would not refer me to an
 outside clinic. I had to find my own clinic
 and pay out of pocket thousands of dollars and drive at least 2 hours away." 70
- > Inadequate testing: Several servicemembers and veterans reported
 inadequate infertility diagnostics.
 A Coast Guard veteran stated that
 "if getting pregnant is not successful it
 is chalked up as 'unexplained' infertility.71 In her case, after visiting a specialist, the "unexplained" infertility was
 revealed to be in part due to exposure
 to mold which was never considered
 by military health care providers.72
- > Complex referral system: For veterans, the complexity of the VA's referral system can pose an additional barrier. VA has historically been inconsistent in how referrals are made and how claims and payments to community care providers are handled. 73 Reports indicate that veterans struggle to make appointments and experience long delays to access community care, and it is unclear whether VA community care providers are even accepting new patients. 74

> Referrals to limited service providers:

Some veterans report that referrals were made to providers who did not provide a full range of options or did not have payment agreements with the VA.75 This problem is compounded when VA refers to religious institutions, which not only do not offer IVF services for religious reasons but may fail to even disclose that IVF is an option. For example, U.S. Senator Tammy Duckworth has previously shared her experience with such a referral. After eight years of unsuccessful infertility care at an institution she was referred to by VA, her doctor told her she was now too old to successfully complete a pregnancy.76 At the recommendation of a friend, she changed physicians, and learned that the VA-recommended provider's religious directives did not permit fertilizing embryos outside of the body—and they never disclosed to her that the service even existed.⁷⁷ Within 18 months of switching providers, Senator Duckworth became pregnant for the first time, and recently celebrated the birth of her second child.

"What bugs me to this day is that she never said, 'You need to go to a different kind of facility.' I was educated! I was the director of Illinois Veterans Affairs. I didn't do my due diligence, so what about those other families?"

U.S. Sen. Tammy Duckworth, Army Officer, Veteran^{vi}

LACK OF ACCOMMODATIONS FOR MEDICAL TREATMENT

Servicemembers may face additional obstacles unique to their service that can imperil the success of their treatment or impede their career advancement opportunities. Such barriers include:

- > Denial of medical leave and accommodations: If a servicemember's command officer designates them as "mission essential," medical leave or time off from work to receive care may not be possible. Pass But infertility care is time-sensitive and requires frequent ultrasound monitoring, blood tests, medication, and availability for egg retrieval. Because members undergoing treatment are not medically exempt from deployment or arduous duty, performance of servicemembers' duties during an IVF cycle may jeopardize the success of their treatment.
- > Denial of medical weight abeyance:

 Military servicemembers must comply with strict weight requirements as part of their service, and failure to pass their weight or body fat standards can make servicemembers ineligible for promotion or transfer opportunities. 80 The high levels of estrogen during an IVF cycle can lead to rapid and substantial temporary weight gain for some patients. Nonetheless, medical weight abeyance has been denied to members who requested relief due to receiving infertility care. 81
- No consideration of ongoing treatment in transfer decisions: Infertility treatment does not have a medical designation that requires priority, so there is no mechanism in place to ensure that superior officers accommodate a servicemember's infertility treatment needs when they are transferred to a new location. For example, proximity to a clinic that provides infertility care

is not a consideration. Transfers may also increase the cost of care significantly as patients must change clinics. One servicemember reported that as a result of three transfers within five years, she was forced to undergo expensive, duplicative tests despite having performed those same tests at her previous clinic.82 Moreover, after being transferred from California to Virginia mid-cycle, she lost two embryos in shipment from her old clinic to her new one because they were packaged incorrectly.83 Such issues could be avoided if infertility treatment were taken into consideration by those with the authority to issue transfer decisions.

This lack of systematic support, combined with the discriminatory eligibility requirements in TRICARE and VA Care, make access to IVF not only a costly but a difficult, often labyrinthine process.

RECOMMENDATIONS

Gaps in access and coverage for infertility care pose substantial barriers to care, especially for servicemembers and veterans. This is compounded by a significant lack of research and data on the scope of infertility issues servicemembers and veterans face as well as other logistical and systemic barriers.

Laws and policies must promote and protect servicemembers' and veterans' rights to make decisions about their reproductive life, to health, to benefit from scientific progress, to informed consent, and to equality without discrimination. The following are policy recommendations designed to ensure that those who serve have equitable access to infertility care.

> Congress and the administration should take immediate steps to ensure the regular collection and publication of data on infertility incidence and access to care in the military and among veterans,

disaggregated by age, race/ethnicity, sex, sexual orientation, and marital status (including for same-sex married couples), geographical location, and military rank, including:

- > The number of self-reported cases of infertility, either clinical or social;
- > The number of diagnosed clinical infertility cases;
- > The number of clinical infertility diagnoses that are "unexplained;"
- > The number of people diagnosed with clinical infertility and also known to be exposed to toxic chemicals during service-related activities;
- > The number of patients who would be eligible for infertility services but for their marital status;
- The extent to which there are data gaps in infertility incidence and access to care for BIPOC servicemembers and veterans; and
- > Whether there is a discrepancy between rates of self-reported infertility and rates assessed by diagnostic codes within the system of the Defense Health Administration/the Veterans Health Administration.

- > Congress and the administration must ensure that all servicemembers and veterans receive insurance coverage for "non-coital" reproductive services such as IUI and IVF, without limitations with regard to whether their infertility is service-connected, whether they are impacted by clinical or social infertility, their marital status, or their sexual orientation. Such insurance coverage must include at least three cycles of IVF.
- > Congress and the administration must also address the high demand for infertility services, including IUI and IVF, by expanding the Defense Health Administration (DHA)'s and VHA's capacity to ensure a greater number of participating providers with greater geographic diversity.
- > DHA and VHA must incorporate existing best practice recommendations for infertility care as established by the American Society for Reproductive Medicine, the American College of Obstetricians and Gynecologists, and the World Health Organization.
- DHA and VHA must issue and implement guidance for infertility care referrals, including disclosure of practice limitations such as religious objections by the provider to certain infertility services.

Endnotes

- 1 Hui Sun et al., Global, Regional, and National Prevalence and Disability-Adjusted Life-Years for Infertility in 195 Countries and Territories, 1990-2017: Results from a Global Burden of Disease Study, 2017, 11(23) Aging 1092 (Dec. 15, 2019), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6932903/ (finding that the global burden of infertility incidence increased globally for both males and females between 1990 and 2017).
- 2 Key Statistics from the National Survey of Family Growth – / Listing, CTRS. FOR DISEASE CONTROL & PREVENTION, https://www.cdc.gov/nchs/nsfg/ key_statistics/i_2015-2017.htm#infertility.
- 3 ANJANI CHANDRA ET AL., INFERTILITY AND IMPAIRED FECUNDITY IN THE UNITED STATES, 1982-2010: DATA FROM THE NATIONAL SURVEY OF FAMILY GROWTH (2013), https://www.cdc.gov/nchs/data/nhsr/nhsr067. pdf. American Society for Reproductive Medicine (ASRM) Committee on Gynecologic Practice, Infertility Workup for the Women's Health Specialist, 133 Obstetrics & Gynecology e377 (2019), https://www.acog.org/-/media/project/acog/acogorg/clinical/files/committee-opinion/articles/2019/06/infertility-workup-for-the-womens-health-specialist.pdf.
- 4 Amanda B. Reed-Maldonado & Kristin C. Madden, *Infertility and the Military Male*, 37 Seminars Reprod. Med. 5 (2019), https://www. thieme-connect.com/products/ejournals/abstract /10.1055/s-0039-1694027.
- 5 How Common Is Infertility, U.S. DEP'T. OF HEALTH & HUMAN SERVICES (last reviewed Feb. 2018), https:// www.nichd.nih.gov/health/topics/infertility/conditioninfo/common.
- 6 Fernando Zegers-Hochschild et al., *The International Glossary on Infertility and Fertility Care, 2017*, 32 Human Reproduction 1786 (2017), https://secureservercdn.net/198.71.233.47/3nz.654.myftpupload.com/wp-content/uploads/2017-HR-Glossary.pdf.
- See generally Monique Tello, Racism and Discrimination in Health Care: Providers and Patients, HARVARD HEALTH PUBLISHING: HARVARD HEALTH BLOG (Jan. 16, 2017, 9:30 AM), https://www. health.harvard.edu/blog/racism-discriminationhealth-care-providers-patients-2017011611015; David R. Williams & Toni D. Rucker, Understanding and Addressing Racial Disparities in Health Care, 21 HEALTH CARE FIN. Rev. 75 (2000), https://www. ncbi.nlm.nih.gov/pmc/articles/PMC4194634/; Ursula E. Bauer & Marcus Plescia, Addressing the Disparities in the Health of American Indian and Alaska Native People: The Importance of Improved Public Health Data, 104 Am. J. Pub. Health S255 (2014), https://www.ncbi.nlm.nih.gov/pmc/ articles/PMC4035867/.
- 8 Anjani Chandra et al. *supra* note 3; Melissa Wellons et al., *Racial Differences in Self-reported Infertility and Risk Factors for Infertility in a Cohort of Black and White Women: The CARDIA Women's*

- Study, 90 Fertility & Sterility 1640 (2008), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2592196/.
- 9 E.A. Weedin et al., The Prevalence of Infertility in American Indian/Alaska Natives and Other Racial/ Ethnic Groups: National Survey of Family Growth (NSFG), 107 FERTILITY & STERILITY e44 (2017), https:// www.fertstert.org/article/S0015-0282(17)30166-8/ fulltext.
- 10 Demographics of the U.S. Military, COUNCIL ON FOREIGN RELATIONS, https://www.cfr.org/backgrounder/demographics-us-military (last updated July 13, 2020).
- 11 /d.
- 12 National Women's Law Center calculations based on 2018 American Community Survey (ACS), using IPUMS USA, University of Minnesota, available at www.ipums.org.
- 13 Chandra et al., supra note 3, at 1.
- 14 Saswati Sunderam et al., Assisted Reproductive Technology Surveillance United States 2014, MORBIDITY & MORTALITY WKLY. REP. SURVEILLANCE SUMMARIES, Feb. 10, 2017, at 1-2, https://www.cdc.gov/mmwr/volumes/66/ss/pdfs/ss6606.pdf.
- 15 /d.
- 16 Soc'Y FOR ASSISTED REPROD. TECH., FINAL NATIONAL SUMMARY REPORT FOR 2018 (2018), https://www. sartcorsonline.com/rptCSR_PublicMultYear. aspx#patient-cumulative (Select "Patient's Own Eggs" and "Births Per Retrieval (First Transfer)", and filter for "First IVF").
- 17 IVF by the Numbers, PENN MEDICINE: FERTILITY BLOG (Mar. 14, 2018), https://www.pennmedicine.org/ updates/blogs/fertility-blog/2018/march/ivf-bythe-numbers.
- 18 Saswati Sunderam et al., Assisted Reproductive Technology Surveillance – United States 2016, Morbidity & Mortality Wkly. Rep. Surveillance Summaries, Apr. 26, 2019, at 8-9, https://www.cdc.gov/mmwr/volumes/68/ss/pdfs/ss6804a1-H.pdf.
- 19 Cost of IVF: Cost Components, FertilityIQ (last accessed May 14, 2020), https://www.fertilityiq. com/ivf-in-vitro-fertilization/costs-of-ivf#costcomponents; American Society For Reproductive MEDICINE (ASRM), Disparities in Access to Effective Treatment for Infertility in the United States: An Ethics Committee Opinion, 104 Fertility & STERILITY 1104 (2015), https://www.asrm.org/ globalassets/asrm/asrm-content/news-andpublications/ethics-committee-opinions/disparities_in_access_to_effective_treatment_for_infertility_in_the_us-pdfmembers.pdf; see also Kelsey Sheehy, Millennial Money: Managing the High Cost of Infertility, WASH. POST (Mar. 31, 2020), https://www.washingtonpost.com/health/ millennial-money-managing-the-high-cost-ofinfertility/2020/03/31/ebb12f62-733f-11ea-ad9b-254ec99993bc_story.html.

- 20 The Importance of 3 Full Cycles of IVF, Nat'L Inst. FOR HEALTH & CARE EXCELLENCE (Oct. 31, 2014), https://www.nice.org.uk/news/blog/the-importance-of-3-full-cycles-of-ivf.
- 21 Amy Klein, *I.V.F. is Expensive. Here's How to Bring Down the Cost*, N.Y. Times (Apr. 18, 2020), https://www.nytimes.com/article/ivf-treatment-costsguide.html; *see also* Megan Leonhardt, *Women are Traveling Far and Wide for Affordable IVF Here's Why It's So Expensive*, CNBC (Aug. 13, 2019), https://www.cnbc.com/2019/08/13/women-are-traveling-far-and-wide-for-affordable-ivf. html.
- 22 Emily S. Jungheim, In Vitro Fertilization Insurance Coverage and Chances of a Live Birth, 317 J. Am. Med. Ass'n. 1273 (2017), doi:10.1001/jama.2017.0727.
- 23 Prosper Marketplace, Fertility Treatments in the United States: Sentiment, Costs, and Financial Impact, PROSPER BLOG, https://blog.prosper. com/2015/05/20/fertility-treatments-in-the-united-states-sentiment-costs-and-financial-impact/ (last accessed Nov. 27, 2019).
- 24 Bronwyn Bedrick et al., Factors Associated with Early In Vitro Fertilization Treatment Discontinuation, 112 Fertility & Sterility 105 (2019), https://www.fertstert.org/article/S0015-0282(19)30250-X/fulltext.
- 25 Christina Caron, Getting Pregnant with IUI: What You Need to Know, N.Y. TIMES (Apr. 18, 2020), https://parenting.nytimes.com/becoming-aparent/getting-pregnant-iui.
- 26 Id.
- 27 Harvard Mental Health Letter: The Psychological Impact of Infertility and its Treatment, Harvard Health Publishing (May 2009), https://www.health.harvard.edu/newsletter_article/Thepsychological-impact-of-infertility-and-its-treatment.
- 28 Heather Stringer, No Insurance Required: Psychologists Who Treat the Trauma of Infertility, 48 Am. Psychol. Ass'n 70 (2017), https://www.apa. org/monitor/2017/07-08/trauma-infertility.
- 29 Service Women's Action Network, Access to Reproductive Health Care: The Experiences of Military Women (2018), https://www.servicewomen.org/ wp-content/uploads/2018/12/2018ReproReport_ SWAN-2.pdf.
- 30 Demographics of the U.S. Military, COUNCIL ON FOREIGN RELATIONS, supra note 10. ("When the draft ended in 1973, women represented just 2 percent of the enlisted forces and 8 percent of the officer corps. Today, those numbers are 16 percent and 18 percent respectively, a significant increase...")
- 31 Jodie Katon, Self-Reported Infertility Among Male and Female Veterans Serving During Operation Enduring Freedom/Operation Iraqi Freedom, 23 J. Women's Health (Larchmount) 175 (Feb. 2014), DOI: 10.1089/jwh.2013.4468 (finding that 15.8% of female and 13.8% of male veterans reporting experiencing infertility).

- 32 SHAUNA STAHLMAN & MICHAEL FAN, FEMALE INFERTILITY, ACTIVE COMPONENT SERVICE WOMEN, U.S. ARMED FORCES, 2013-2018 (2019), https://health.mil/ News/Articles/2019/06/01/Female-Infertility.
- 33 Id.
- 34 Id.
- 35 Kristy N. Karmack, Cong. Research Serv., R44321, DIVERSITY, INCLUSION, AND EQUAL OPPORTUNITY IN THE ARMED SERVICES: BACKGROUND AND ISSUES FOR CONGRESS 39 (2019), https://fas.org/sgp/crs/natsec/R44321. pdf.
- 36 Molly Clever & David R. Segal, *The Demographics of Military Children and Families*, 23 The Future of Children 43 (2013), https://pdfs.semantic-scholar.org/c567/b17bc58e83e93e68e28f-1cfe270473593a48.pdf; Jennifer Schultz, *Veterans by the Numbers*, Nat'l Conference of State Legislatures: BLog (Nov. 10, 2017), http://www.ncsl.org/blog/2017/11/10/veterans-by-the-numbers.aspx.
- 37 Ginny L. Ryan, Investigator-Initiated Research 13-294 — Human Services Research & Development Study: Impact of Sexual Assault and Combat-Related Trauma on Fertility in Veterans, U.S. Dep't of Veterans Affairs (last visited June 14, 2019), https://www.hsrd.research.va.gov/ research/abstracts.cfm?Project_ID=2141704065.
- 38 See, e.g. Karen Jowers, Do Military Women Have Higher Rates of Infertility than Civilians?, MILITARY TIMES (Dec. 14, 2018), https://www.militarytimes.com/pay-benefits/2018/12/14/do-military-womenhave-higher-rates-of-infertility-than-civilians/; Military Women: On the Hook for Infertility?, CTR. FOR REPROD. MED. & ADVANCED REPROD. TECHS., https://ivfminnesota.com/military-women/.
- 39 Joseph Pizzorno, Environmental Toxins and Infertility, 17 INTEGRATIVE MED. 8, 8-40 (2018), https://www.ncbi.nlm.nih.gov/pmc/articles/ PMC6396757/.
- 40 Service Women's Action Network, Survey Data (2018) (on file with the Service Women's Action Network).
- 41 Ginny L. Ryan et al., Voluntary and Involuntary
 Childlessness in Female Veterans: Associations
 with Sexual Assault, 102 FERTILITY & STERILITY 539,
 542, 544 (2014), https://www.fertstert.org/article/
 S0015-0282(14)00402-6/fulltext.
- 42 Kristin L. Rooney & Alice D. Domar, *The Relationship Between Stress and Infertility*, 20 DIALOGUES IN CLINICAL NEUROSCIENCE 41 (2018), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6016043/.
- 43 Kristin Mattocks et al., Infertility Care Among OEF/OIF/OND Women Veterans in the Department of Veterans Affairs, 53 MED. CARE S68 (2015), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4410265/ ("Women Veterans who received an infertility diagnosis were also more likely to have a mental health diagnosis than women without an infertility diagnosis, including depression . . . PTSD . . . and bipolar disorder")

- 44 See, e.g. DEPARTMENT OF DEFENSE ANNUAL REPORT ON SEXUAL ASSAULT IN THE MILITARY: FISCAL YEAR 2019, U.S. DEP'T OF DEFENSE 11 (2020), https://www.sapr.mil/sites/default/files//_Department_of_Defense_Fiscal_Year_2019_Annual_Report_on_Sexual_Assault_in_the_Military.pdf; Dave Philipps, 'This is Unacceptable: Military Reports a Surge of Sexual Assaults in the Ranks, N.Y. TIMES (May 2, 2019), https://www.nytimes.com/2019/05/02/us/military-sexual-assault.html; Patricia Kime, Despite Efforts, Sexual Assaults Up Nearly 40% in US Military, MILITARY.COM (May 2, 2019), https://www.military.com/daily-news/2019/05/02/despite-efforts-sexual-assaults-nearly-40-us-military.html.
- 45 Miriam Reisman, PTSD Treatment for Veterans: What's Working, What's New, and What's Next, 41 PHARMACY & THERAPEUTICS 623 (2016), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5047000/.
- 46 TRICARE, Covered Services: Assisted Reproductive Services, https://www.tricare.mil/CoveredServices/IsItCovered/ AssistedReproductiveServices.
- 47 U.S. Dep't of Defense, Implementing Guidance Memorandum: Policy for Assisted Reproductive Services for the Benefit of Seriously or Severely ILL/Injured (Category II or III) Active Duty Service Members (ADSMs) 3 (2012), https://www.sart. org/globalassets/asrm/asrm-content/news-and-publications/news-and-research/press-releasesand-bulletins/pdf/dod_policy_guidance.pdf.
- 48 *ld*.
- 49 Id. ("In other words, there may be a total of six attempts to accomplish three completed IVF cycles. Further, if the injured Service Member has used initiated IVF cycles, subsequently remarries and desires this benefit with the new spouse, the number of cycles available is dependent on prior cycles used.").
- 50 Lori Gawron et al., Impact of Deployment on Reproductive Health in U.S. Active-Duty Servicewomen and Veterans, 36 SEMINARS IN REPROD. MED. 361 (2018), doi:10.1055/s-0039-1678749.
- 51 About VHA, U.S. Dep't of Veterans Affairs, https:// www.va.gov/health/aboutvha.asp (last updated Jul. 14, 2019) (last visited Apr. 2, 2020).
- 52 38 CFR § 17.38(c)(2).
- 53 Continuing Appropriations and Military
 Construction, Veterans Affairs and Related
 Agencies Appropriations Act, 2017, and Zika
 Response and Preparedness Act, Pub. L. No. 114223 § 260, https://www.congress.gov/bill/114thcongress/house-bill/5325; Fertility Counseling
 and Treatment for Certain Veterans and Spouses,
 38 C.F.R. § 1762 (2019), https://www.federalregister.gov/documents/2019/03/07/2019-04096/
 fertility-counseling-and-treatment-for-certainveterans-and-spouses.
- 54 The Department of Veterans Affairs notes: "For the purposes of this section, "a service-connected disability that results in the inability of the veteran to procreate without the use of fertility treatment" means, for a male veteran, a

- service-connected injury or illness that prevents the successful delivery of sperm to an egg; and, for a female veteran with ovarian function and a patent uterine cavity, a service-connected injury or illness that prevents the egg from being successfully fertilized by a sperm. This definition parallels requirements in DoD policy guidance for an active duty service member who is seriously or severely ill/injured (Category II or III) to receive fertility counseling and treatment using ART." 82 Fed. Reg. 6273 (January 19, 2017).
- 55 REPORT TO CONGRESS: EFFORTS TO TREAT INFERTILITY OF MILITARY FAMILIES, OFFICE OF THE SEC'Y OF DEFENSE 1, 8 (2015).
- 56 EMILY K. LANE, CONG. RESEARCH SERV., IF11504, INFERTILITY IN THE MILITARY (2020), https://crsreports. congress.gov/product/pdf/IF/IF11504.
- 57 Service Women's Action Network, Survey Data, *supra* note 40.
- 58 /d.
- 59 BRYCE H. P. MENDEZ, CONG. RESEARCH SERV., IF10530, DEFENSE PRIMER: MILITARY HEALTH SYSTEM (2020), https://fas.org/sgp/crs/natsec/IF10530.pdf.
- 60 All Provider Directories, TRICARE (last visited May 30, 2019), https://www.tricare.mil/FindDoctor/ AllProviderDirectories/NonNetwork.
- 61 John A. Harris, Geographic Access to Assisted Reproductive Technology Health Care in the United States: A Population-Based Cross-Sectional Study, 107 Fertility & Sterility 1023 (2017), https://doi.org/10.1016/j.fertnstert.2017.02.101.
- 62 Report to Congress, supra note 55, at 7.
- 63 IVF Success Rates: The Impact of Female Age,
 FERTILITYIQ (last accessed May 19, 2020), https://
 www.fertilityiq.com/ivf-in-vitro-fertilization/ivfsuccess-rates#the-impact-of-female-age.
- 64 Service Women's Action Network, Survey Data, supra note 40.
- 65 REPORT TO CONGRESS, supra note 55, at 7.
- 66 Service Women's Action Network, Access to Reproductive Health Care: The Experiences of Military Women (2018), *supra* note 29.
- 67 /
- 68 E-Mail from Kerry Karwan, Retired Lieutenant Commander, U.S. Coast Guard, to Freya Riedlin, Fed. Policy Counsel, Ctr. for Reprod. Rights (June 10, 2020 10:43am). On file at Ctr. for Reprod. Rights.
- 69 Service Women's Action Network, Survey Data, *supra* note 40.
- 70 *Id*
- 71 E-Mail from Kerry Karwan, supra note 68.
- 72 *Id*.
- 73 Carrie M. Farmer et al., Balancing Demand and Supply for Veterans' Health Care: A Summary of Three RAND Assessments Conducted Under the

- Veterans Choice Act, 20 Rand Health Q. 12 (2016), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5158276/.
- 74 CARRIE M. FARMER & TERRI TANIELIAN, ENSURING ACCESS TO TIMELY, HIGH-QUALITY HEALTH CARE FOR VETERANS: INSIGHTS FROM RAND RESEARCH (2019) (testimony submitted to the Senate Committee on Veterans' Affairs).
- 75 Service Women's Action Network, Survey Data, *supra* note 40.
- 76 Rebecca Johnson, Senator Tammy Duckworth on the Attack that Took Her Legs-and Having a Baby at 50, Vogue (September 12, 2018), https://www.vogue.com/article/tammy-duckworth-interview-vogue-october-2018-issue.
- 77 Id.
- 78 Report to Congress, supra note 55.
- 79 E-Mail from Kerry Karwan, Retired Lieutenant Commander, U.S. Coast Guard, to Freya Riedlin, Fed. Policy Counsel, Ctr. for Reprod. Rights (Feb. 3, 2020 1:33 PM EST) (attaching fact sheet with information on military fertility issues and IVF use among service members).
- 80 See, e.g. Stew Smith, Army Weight Control Program, MILITARY.COM, https://www.military.com/military-fitness/army-fitness-requirements/weight-control-program (last visited July 16, 2020).
- 81 E-Mail from Kerry Karwan, supra note 79.
- 82 E-Mail from Kerry Karwan, supra note 68.
- 83 *ld*.

Quote Endnotes

- Service Women's Action Network, Survey Data (2018) (on file with the Service Women's Action Network).
- ii *Id*.
- iii /d.
- iv /d.
- v Id
- vi Rebecca Johnson, Senator Tammy Duckworth on the Attack that Took Her Legs—and Having a Baby at 50, Vogue (September 12, 2018), https:// www.vogue.com/article/tammy-duckworthinterview-vogue-october-2018-issue.



199 Water Street, Floor 22 New York, NY 10038

Tel +1 917 637 3600

Fax +917 637 3666

1015 15th Street, NW, Suite 600 Washington, DC 20005

info@servicewomen.org 202 798 5570

www.servicewomen.org