Commentary

Improving VA Women’s Health and Healthcare Delivery: Partnerships Bring Evidence to Bear on Practice and Policy

Women Veterans are the fastest growing segment of new users of the VA healthcare system. Nearly 20 percent of Active Duty service members and over 20 percent of National Guard and Reserve members are women. VA projects a 32 percent increase in the number of women Veterans served in VA healthcare facilities by 2029. VA must meet the challenges of delivering timely, high quality, comprehensive care to this growing population of women Veterans in a sensitive and safe environment.

To meet this challenge, we must first understand the unique needs of women Veterans. Women Veterans are, on average, a decade younger than their male counterparts, and are much more racially and ethnically diverse. While they are younger on average, women Veterans face substantial physical and mental healthcare needs when compared to their male counterparts (among those relying on VA care), including comparable chronic disease burdens, and greater prevalence of musculoskeletal conditions and mental health challenges. Some women Veterans’ mental health needs stem from higher rates of military sexual trauma (assault, abuse, and/or harassment during military service), which is associated with higher rates of PTSD, depression, and anxiety. Women Veterans have expressed trust concerns in VA care environments, making trauma-informed and trauma-sensitive care a must.

Women Veterans also have social determinants of health that warrant particular attention; they are more likely to be unemployed and to live in poverty, and they lack adequate social supports. These challenges complicate care delivery and self-management. In addition, recent research highlights emerging cardiovascular risks for women Veterans, including PTSD and gender disparities in cardiovascular care.

Women Veterans have gender-specific healthcare needs, including gender-specific preventative care (e.g., breast and cervical cancer screening) and reproductive care across the life course (ranging from menstrual disorders, sexual health, pregnancy and maternity care to menopause). Gender-neutral conditions also deserve attention, especially those more common among women (e.g., osteoporosis), and those with distinct clinical presentations or treatment needs among women (e.g., heart disease).

Given women Veterans’ historical numerical minority in VA, we also must pay close attention to the potential for gender disparities in access, utilization, quality, and patient experience to ensure VA is a welcoming, high-quality healthcare resource; this need extends from military discharge to later life issues (e.g., long term care and palliative care), and everything in between.

Research has been critical to informing VA Office of Women’s Health policy in every area. VA research on pregnancy risks and maternity care needs informed development of VA’s national Maternity Care Coordination Program, with trained Maternity Care Coordinators at every VA, in addition to stronger links to community care obstetricians-gynecologists as needed. Research examining Veteran-specific factors in maternal morbidity has informed our plans to extend maternity care coordination for a full 12 months postpartum, while we examine the best team configuration for managing maternity care in VA.

VA research on infertility has similarly informed evidence-based policy development and the array of services we provide. For example, women Veterans with service-connected conditions that cause infertility may now be eligible for in vitro fertilization (IVF) or other forms of assisted reproductive technology services. Other fertility-related services for women Veterans include infertility assessments and counseling, genetic counseling and testing, imaging services, hormonal or surgical therapies, and a host of other services. VA research helps us understand that women Veterans with histories of military sexual trauma (MST), combat trauma, or PTSD are two to three times more likely to have chronic pelvic pain, informing care models and services to meet their needs.

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Providing high-quality healthcare to women Veterans is one of VA’s top priorities. Women are a growing and important population of Veterans. Their sociodemographics, needs, and experiences differ from male Veterans. For example, women Veterans are younger, more diverse in race/ethnicity, more often have a service-connected disability, have more outpatient visits, and suffer from greater mental health burdens and higher rates of sexual harassment, abuse, and assault. Women Veterans should have equitable access to VA healthcare, and they should feel safe and welcome whenever they seek assistance and care.

VA has embarked on many efforts to help achieve this. Chief among these is the funding of research that identifies ways to improve the health and delivery of care for women Veterans across the lifespan. Starting in 2004, HSR&D worked with the other VA Services to develop the first national VA Women’s Health Research Agenda. Today, HSR&D has funded many projects, including those highlighted in this issue of FORUM. These projects strive to improve women Veterans’ engagement and retention in VA care (Hamilton, p. 8), including their healthcare needs across the lifespan – from preventive care to reproductive care to care for older women Veterans (Mattocks, p. 6, Sadler, p. 5, Gibson, p. 4).

These projects require that research investigators work with VA clinical and operational partners, which expedites the translation of research findings into practice and helps make sure the research addresses the needs of women Veterans. Examples of operational partners include the Office of Women’s Health (Hayes, p. 1), Office of Health Equity, Office of Mental Health & Suicide Prevention, Office of Rural Health, LGBTQ+ National Program Office, Office of Post Deployment Health, and more (Yano, p. 3).

Why does this work matter? Our research has shown that we can find ways to improve care for women Veterans, reduce harassment, help prevent women Veteran suicide, improve prosthetics for women, and more. HSR&D is committed to funding this important research and working with its operational partners to improve the health and healthcare of women Veterans.

Amanda Borsky, DrPH, MPP, HSR&D Scientific Program Manager, and David Atkins, MD, MPH, Director, HSR&D

The research-policy intersection is apparent in our work on VA culture change and ending harassment. This journey grew from VA HSR&D’s critical experiment in changing how VA researchers partner with operations leaders to design studies capable of accelerating research impacts on top health system priorities. The resulting Collaborative Research to Enhance and Advance Transformation and Excellence (CREATE) initiative led to five studies co-designed with leading VA women’s health researchers. Each of these studies enabled us to use research evidence to accelerate delivery of comprehensive care for women Veterans.

These studies include seminal work on drivers of attrition among women Veterans new to VA, factors that hasten or hinder delivery of comprehensive women’s healthcare, and women Veterans’ community care experiences and needs. The findings from this work informed how we approach our national Women Veterans’ Call Center; support local provision of enhanced women’s healthcare services and access to designated women’s health primary care providers; and support care coordination for women relying on VA and VA-paid community care. Of the five studies, two were trials. One of those trials served as the foundation for how we virtually support providers delivering care in community clinics at a distance from the resources of our large VA medical centers. The second focused on an evidence-based quality improvement (EBQI) approach to gender-tailoring VA’s patient-centered medical home model (Patient Aligned Care Teams or PACTs) to meet women Veterans’ needs.

While each study has informed practice and policy changes, including our Office’s adoption of EBQI for national implementation, our research-operations partnership ensured constant attention to how women Veterans use VA and what their experiences are like once engaged in care. This framing led to inclusion of a question on whether women Veterans had ever experienced harassment when they came to VA for care, and if so, what did they experience. The results were quite concerning – one in four women Veterans reported being harassed on their way to see their VA provider by men Veterans, and those harassment experiences led to delayed and missed care. Well before publication of a scientific paper, the partnership enabled us to learn these results and begin addressing them.

The research team quickly assessed what worked outside VA to combat harassment, and developed VA adaptations with input from Veterans and VA employees. We launched a National Culture Campaign in a matter of months instead of years.

That Campaign continues and has been augmented with additional programs, like Stand Up to Stop Harassment Now!, and a Secretary-level team focused on ending harassment for Veterans and staff members alike. Ongoing evaluation of the Campaign’s progress is provided through our Office’s partnership with the VA Women’s Health Research Network, which conducts annual surveys of women receiving VA care. The partnered work that followed positioned us to bring research evidence to bear on Congressional inquiries once the scientific papers on stranger harassment were published.

Given our longstanding partnerships with VA health services researchers across the system, we can now consider where additional research is needed to improve care for our nation’s women Veterans. For example, we will continue the work of making
The Critical Role VA Health Services Research Plays in Partnership with Health System Leaders to Accelerate Evidence-based Advances in Care for Women Veterans

Drs. Hayes and Haskell note in their Commentary that the rapid increase in women Veterans among VA users escalates demand for a stronger evidence base to guide their care. Fortunately, VA HSR&D has been a leader in women Veterans’ research, addressing critical knowledge gaps. Aligned with VA’s Office of Women’s Health (OWH) and other health system partners since its inception in 2010, the VA Women’s Health Research Network (WHRN) is among HSR&D’s initiatives to transform VA’s capacity to: 1) reduce gender disparities in health and healthcare; and 2) use research to increase delivery of evidence-based care tailored to women Veterans’ needs. To that end, WHRN has three arms: a Research Consortium, a Women’s Health Practice-Based Research Network (WH-PBRN), and a Multilevel Stakeholder Engagement Team.

From the outset, the Consortium focused on building awareness and capacity through women Veteran-focused education and training (over 100 national cyber-seminars to date); technical support (consults, pre-submission scans of grant proposals); mentorship (national cadre of mentors, career development support in key areas such as intimate partner violence, cardiovascular risk reduction, reproductive healthcare, and more); collaborative research development (national work groups supporting scores of women’s health grant proposal submissions); dissemination (eight VA-funded journal supplements, topical lay-language research “snapshots,” conferences); and enhanced research-operational partnerships to accelerate translation of research into evidence-based practice and policy. By 2014, WHRN convened a National VA Women’s Health Services Research Conference, bringing together national VA policy leaders and women’s health researchers, as well as leaders from the Institute of Medicine, U.S. Departments of Defense, Health & Human Services (including NIH), Justice, and Labor, among others. Participants learned about the state of the science and reached consensus on an HSR&D-focused research agenda, which expanded strategic planning in new priority areas, including access/rural health, primary care/prevention, mental health, post-deployment health, complex chronic conditions/aging, and reproductive health. Meaningful partnerships with operations leaders were central to these efforts, with foundational, bidirectional expectations that VA priorities would drive VA women’s health research, and VA women’s health research would inform VA practice and policy.1

With this foundation, we turned our attention to driving the implementation of women’s health research — rare prior to WHRN — to accelerate impacts. First, we focused on the portfolio of work in the HSR&D-funded Women Veterans’ Healthcare CREATE Initiative mentioned by Drs. Hayes and Haskell, our primary CREATE partners, leveraging the WH-PBRN to facilitate recruitment of sites, providers/staff, and women Veterans. Capitalizing upon the WH-PBRN as a testing ground for implementing and spreading evidence-based practices, one of the CREATE trials tested an evidence-based quality improvement (EBQI) approach to gender-tailoring primary care. It demonstrated substantial gains in access to women’s primary care providers, trauma-sensitive care, and cancer screening and follow-up, improved PACT team function and providers’ gender sensitivity, and lowered burnout. WHRN extended this strategy through the WH-PBRN’s deployment of regional and national Quality Improvement Collaboratives, leveraging trial evidence in naturalistic settings, while studying how to spread evidence more effectively and efficiently. OWH has since adopted EBQI nationally.

Having grown from four to 76 VA facilities nationally, the WH-PBRN now covers the majority of women Veterans seen in VA. Investigators wanting to enhance representation of women Veterans or VA women’s health providers in their studies can capitalize on site leads’ local connections with patients, clinicians, staff, managers, and leaders. Nearly 100 multi-site projects have benefited from this national network, selecting sites that meet their study needs. Given the fundamentally partnered nature of our work, it is no surprise that studies conducted in the WH-PBRN have examined many of the key topics highlighted by Drs. Hayes and Haskell, such as breast cancer screening, pregnancy, contraception, menopause, heart disease, suicide prevention, PTSD, military sexual trauma, and community care. Expertise in recruiting women Veterans into VA research also led to funding from the VA Cooperative Studies Program (CSP) to evaluate how to optimize women’s enrollment in a comparative effectiveness trial of PTSD treatment (CSP #591), building a bridge between clinical sciences and HSR&D.

As WHRN evolved, we began testing strategies for supporting VA as a learning healthcare system, increasing employee engagement in research-clinical partnerships capable of generating and acting on research evidence to respond to priority needs.2 For example, given that the rate of suicide among women Veterans is nearly double that of civilian women, WHRN’s Consortium launched a women Veterans’ suicide research group, partnered with VA’s Office of Mental Health & Suicide Prevention, yielding a portfolio of partner-responsive work including a national research agenda, a published journal supplement, and six new studies in record time. In parallel, the WH-PBRN designed novel practice scans of member sites to learn how care is organized or delivered. The WH-PBRN can also rapidly gauge women Veterans’ care preferences and experiences via short anonymous in-clinic surveys, feeding results back to participating sites and health system leaders; over 50 VAs and thousands of

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The Menopause Transition: An Opportunity for Prevention and Intervention to Improve Women Veterans’ Health and Healthcare Across the Lifespan

Almost half of women* Veterans served by VA are aged 45-64, the age range typically affected by the menopause transition (perimenopause and early post menopause). This period is characterized by changes in reproductive hormones and symptoms that impact daily functioning and quality of life, including hot flashes and night sweats, sleep difficulty, genitourinary symptoms (e.g., urinary incontinence, vaginal irritation/dryness, pain with intercourse), and mood changes. Risk for depressive episodes is also two to five times higher during this period compared to other points in the lifespan. Hormone changes, menopause symptoms, and accumulating risk factors in the menopause transition influence risk for aging-related chronic health conditions such as cardiovascular disease, osteoporosis, and sexual dysfunction, which increases dramatically for postmenopausal women.

Women Veterans exhibit a high prevalence of risk factors (e.g., cigarette smoking, trauma exposures, life stressors, pre-existing conditions) and reproductive health concerns that may contribute to greater menopause symptom burden, as well as common health and mental health comorbidities. Unaddressed menopause symptoms can impact health, mental health, and daily functioning, and represent a missed opportunity to promote healthy lifestyle changes. However, there are no official guidelines for menopause management in VA, and current practices and preferences for menopause-related care are unknown. It is essential to understand the experiences, care needs, and care preferences of menopausal women Veterans so that VA providers can offer effective, gender-sensitive care. Further, we need to understand providers’ current practices and the challenges they face specific to menopause-related care in VA in order to offer resources for improved care. In this way, the menopause transition can shift from a period of vulnerability to an opportunity to improve whole health and healthy aging in the years that follow.

Published and Preliminary Findings

“Improving Women Veterans’ Health: Addressing Menopause and Mental Health” was designed to identify and address gaps in our knowledge of women Veterans’ experience of menopause and menopause-related care in VA. This study uses multiple approaches, including: 1) cross-sectional, national VA electronic health record data for all women Veterans aged 45-64 receiving VA care in FY2014-2015 (n= 200,901); 2) survey data collection in a sample of 232 women Veterans aged 45-64 enrolled in VA care in Northern California; and 3) qualitative interviews with women Veterans aged 45-64 (n=32) and VA primary care providers (n=13) from eight VA Women’s Health Practice-Based Research Network sites across the country.

We first used electronic health record (EHR) data to examine menopausal hormone therapy prescribing patterns and menopause symptom burden (menopausal hormone therapy and/or ICD codes indicating menopause symptoms) in relation to common comorbidities among midlife women Veterans. We found potential disparities in menopause symptom management, with Black women Veterans less likely than their non-Black peers to have documented menopause symptoms or be prescribed menopausal hormone therapy, despite ample evidence from observational studies in community samples supporting a higher frequency, more severity and bother, and longer duration of vasomotor symptoms among Black women compared to other racial/ethnic groups.

We also found that a higher symptom burden may indicate underlying complex comorbidities and potential complications with treatment for comorbid conditions. Menopause symptom burden was associated with depression, anxiety, post-traumatic stress disorder, and chronic pain; among those women with chronic pain, menopause symptom burden was also associated with higher risk patterns of opioid receipt, including long-term, high-dose opioids and long-term opioids co-prescribed with other central nervous system depressants (e.g., sedative-hypnotics) despite the increased risk for misuse and overdose that these combinations bring.

EHR data provides limited information on menopause symptom experience, highlighting the importance of primary data collection for additional insights. In our study, most survey respondents reported experience of common menopause symptoms within the past two weeks, including hot flashes and night sweats (54 percent), genitourinary symptoms (69 percent), and sleep difficulty at the level of moderate-severe clinical insomnia (based on Insomnia Severity Index scores; 36 percent). Manuscripts examining potential demographic and psychosocial risk factors for menopause symptom burden are currently in progress.
Research Highlight

Using Shared Decision-Making to Individualize Mental Health Services for Post-9/11 Veterans

Every day, thousands of VA clinicians across the nation report to work to provide care to approximately nine million Veterans. Those treated include post-9/11 Veterans, an emerging population with complex care needs who are distinctly different from those who served in previous eras. Three quarters of these 2.8 million post-9/11 Veterans have deployed at least once, with women and Reserve and National Guard members (RNG) among the fastest growing segments of VA-eligible Veterans. Notably, post-9/11 Veterans are twice as likely as those serving in earlier eras to have served in a combat zone and more likely to have experienced emotional trauma, although only a third indicate they have sought mental health (MH) services. Almost half of post-9/11 women Veterans report that it is difficult to adjust to civilian life, similar to their male peers. RNG Veterans may be actively serving and potentially have care fragmented between the Department of Defense, VA, and/or community providers; and both women and RNG Veterans experience unique deployment and readjustment stressors, as well as suicide risk.

Research is unequivocal that PTSD, depression, and substance use are highly prevalent post-deployment MH conditions. However, many women Veterans report MH care stigma and barriers, and only a quarter use VA services. These findings are of great concern as most suicides occur among Veterans who have not recently received VA services. Even among those enrolled in VA care, engagement in MH care is not a given. A large, national study examined post-9/11 Veterans with newly diagnosed PTSD and identified that less than a quarter had initiated evidence-based psychotherapy, and only nine percent of these had completed treatment. The disparity in impacts (economic, childcare, gender-based violence) of the COVID-19 pandemic on women sheds an important light on women Veterans’ MH care needs and barriers. In sum, there are critical gaps in engaging Veterans in the needed, and sometimes lifesaving, MH care offered by skilled VA providers. Consequently, our team’s research seeks to address these gaps by using eHealth and shared decision-making (SDM) platforms.

What is Shared Decision-Making? SDM is an active process that occurs when a patient and a provider work together to reach healthcare decisions that are best for the patient, with an emphasis on the patient’s priorities, preferences, and values. SDM exemplifies VA core values because it emphasizes patient-centeredness and relies on a strong evidence base. SDM includes:

- Deciding what MH or readjustment condition the Veteran and provider believe is the priority;
- Reviewing information about available treatment options for the condition; and
- Using the provider’s knowledge and experience and the Veteran’s values and preferences to reach healthcare decisions together.

It is the ethical right of every patient to make decisions about their health and treatment. These decisions should be informed by current gender-specific research evidence in collaboration with the patient’s provider. Despite differences in communication styles found between male and female providers, research indicates that SDM is equally effective between clinician/patient gender dyads. As males comprise two-thirds of VA medical providers, SDM may be important in delivering equitable care for women Veterans by offering a framework to support clinical discussions about MH treatment options.

SDM is especially relevant for women Veterans who are acculturated during their military service to follow orders; or who may fear a loss of control or be disengaged because of their MH symptoms or perceptions of institutional betrayal following gender-based violence. But are VA providers using SDM already? Prior research indicates that there are many myths about SDM that delay widespread adoption, such as providers believing a) they are doing SDM when they really are not; b) using SDM takes more time; and c) that their patients do not really wish to be involved in decision-making.

In this article, our research team describes foundational work leading to, and preliminary findings for, our team’s HSR&D-funded study: Online and Shared Decision-Making Interventions to Engage Service Men and Women in Post-Deployment Mental Health Care (IIR 16-096). This work evaluates processes needed to integrate a web-based interface into current VA systems and to support Veterans’ and providers’ use of SDM regarding MH treatment options. This research aligns with key challenges and priorities identified by VA Secretary Denis McDonough in 2021, including prioritizing women who have served or are still serving in the military, reducing suicide rates, and helping Veterans transition into civilian society.

Foundational Work
Data from this team’s prior studies among women have demonstrated that our web-based interface (WEB-ED): 1) screens
Understanding Pregnancy and Maternity Care for Women Veterans

Nearly 30 years have passed since Congress authorized Public Law 104-262, the Veterans’ Healthcare Eligibility Reform Act of 1996, which allows VA to include pregnancy care as part of the standard benefits package to eligible women Veterans. Over the past decade, the number of pregnant Veterans utilizing VA maternity care benefits for their pregnancies has increased exponentially, with VA paying for more than 42,000 deliveries during that time. However, because VA does not provide obstetric care for Veterans, all obstetric care is delivered by community-based obstetricians enrolled in the VA Community Care Network (CCN) and contracted through Optum or TriWest.

Although many pregnant Veterans continue to see VA providers for ongoing medical and mental healthcare during pregnancy while also receiving obstetric care from community providers, information regarding pregnant Veterans’ experiences during pregnancy remains largely undocumented in VA medical records. Hence, following pregnancy, VA providers have little information available to understand Veterans’ experiences with prenatal care access and utilization, medical and mental health conditions experienced during pregnancy, and postpartum health concerns. And while Public Law (PL) 111-163 Section 206 of the Caregivers and Veteran Omnibus Health Services Act amended VA’s medical benefits package to include up to seven days of medical care for newborns delivered by women Veterans who are receiving VA maternity care benefits, there is virtually no information available regarding the health of the infant.

To better understand women Veterans’ experiences during pregnancy, including medical and mental health conditions, access and utilization of care, the role of social determinants of health in accessing care, postpartum concerns, and newborn care, we launched the HSR&D-funded Center for Maternal and Infant Outcomes Research in Translation (COMFORT) in 2014. Since its launch, the COMFORT study has enrolled more than 1,300 pregnant Veterans from 15 VA facilities nationwide. VA study sites were carefully chosen to include geographically distinct urban and rural settings (e.g., Los Angeles, California and Fargo, North Dakota), and facilities with high proportions of racial and ethnic minority Veterans (e.g., San Juan, Puerto Rico; Little Rock, Arkansas; Durham, North Carolina). The study featured in-depth telephone surveys at two points in time – approximately 20 weeks of pregnancy and 12 weeks postpartum – in order to understand both pregnancy and postpartum health.¹

More than 90 percent of COMFORT-enrolled Veterans completed both the pregnancy and postpartum interviews, giving researchers a view into the full range of perinatal health experiences of women Veterans.

**COMFORT Areas of Focus**

The data generated from the COMFORT study has allowed our study team, along with our co-investigators across the country, to examine many aspects of pregnancy and maternity care. COMFORT has produced more than 20 papers on topics related to maternity care coordination, access to prenatal care, perinatal mental health, intimate partner violence, breastfeeding, abortion, and COVID-19 vaccine hesitancy. Other papers have examined alcohol and tobacco use among pregnant Veterans, sufficiency of information from providers during pregnancy, and pregnancy-related cardiovascular conditions.

An emerging area of interest for our COMFORT study team is racial/ethnic disparities in maternal health, particularly in cesarean section (C-section) rates.² According to the Centers for Disease Control (CDC), the national average rate for C-sections is 32 percent, though substantial geographic and racial/ethnic variation exists. In fact, rates vary from 23 percent in Alaska to 38 percent in Mississippi, and national C-section rates are highest for Black women (36 percent) compared to Hispanic (32 percent) and non-Hispanic White women (31 percent). The COMFORT study found similarly disparate rates, with Veterans of color significantly more likely to deliver by C-section compared to White Veterans (44 percent vs. 29 percent). Furthermore, we found that C-section rates reached nearly 67 percent among women Veterans of color delivering in Little Rock and just over 51 percent in Durham. These rates are substantially higher than the U.S. national average C-section rate noted above.

To better understand why more women Veterans of color are receiving C-sections, the COMFORT study team conducted in-depth interviews with more than 30 women Veterans of color in Durham, Little Rock, and New Orleans who delivered by C-section to understand the circumstances that may have led to the procedure. While many of the Veterans received C-sections due to multiple previous C-sections or conditions that potentially could have endangered their lives or that of their infants, other women were...
uncertain of why a C-section was ordered. Several Veterans who had previously delivered by C-section requested the opportunity to try a vaginal birth after Cesarean (VBAC), but these requests were denied at their first prenatal care appointment. Other women Veterans of color were told that they were either too small or too large to deliver safely, and in one case, a Veteran was given a C-section because the following day was a holiday, and her obstetrician would be on vacation.

Our COMFORT study team is also examining issues related to racial/ethnic disparities in maternal outcomes through an in-depth focus on the quality of care provided by hospitals where women Veterans deliver. Funded by a pilot grant from the Community Care Research Evaluation and Knowledge Center (CREEK), in conjunction with HSR&D, Dr. Kroll-Desrosiers has begun to examine the quality of obstetric care provided to pregnant Veterans enrolled in COMFORT, with a focus on racial/ethnic differences in where Veterans receive care. Growing attention is being paid to healthcare quality, as previous studies have demonstrated that hospital quality is associated with obstetric and neonatal outcomes. The National Quality Forum has produced a set of quality measures for perinatal health that have been adopted by the Joint Commission as standards for accreditation of its healthcare facilities. These perinatal care measures focus on achieving integrated, coordinated, and patient-centered care for clinically uncomplicated pregnancies and births.

What’s Next
Continuing our focus of racial/ethnic disparities in maternal health, our study team was recently awarded an HSR&D pilot grant to test the feasibility of doula care for women Veterans of color. Substantial evidence points to enduring disparities in maternal health and birth outcomes arising from structural and interpersonal racism, pre-existing health conditions, social determinants of health, and healthcare quality. Growing evidence suggests that doulas, nonclinical support paraprofessionals who provide physical, informational, and emotional support to pregnant women, may yield positive results on birth-specific and postpartum-specific outcomes. Doulas care for women in every birth setting – home, birth center, and hospital – and provide services in all phases of childbirth, including pregnancy and postpartum. Studies conducted with low-income Black and Latina women in doula programs that include prenatal, labor, and postpartum support have shown lower rates of cesarean birth, increased breastfeeding initiation, and longer duration of breastfeeding.

We have chosen to conduct our pilot work in Durham and New Orleans as our previous work in C-section rates shows notable disparities in these communities. Our team has been busy setting up contracts with local doula agencies to provide care to a small number of Veterans in these two cities, with the overall aim to test the feasibility of providing doula care to pregnant Veterans. This work requires extensive conversations with doulas, VA maternity care coordinators, and VA women’s health providers to determine which Veterans would most benefit from doula care in this pilot study, what doula benefits Veterans enrolled in the study will receive, and how community-based doulas will interact with VA maternity care coordinators to ensure that pregnant Veterans receive high-quality, coordinated care.

References
Engaging Women Veterans in Evidence-based Care: VA EMPOWER QUERI 2.0

Women Veterans are the fastest-growing segment of users in the Veterans Health Administration (VA), with their numbers projected to increase by 73 percent, from 9 percent to 16 percent of all Veterans, between 2015 and 2043. In anticipation of this increase and in response to women Veterans’ unique and complex healthcare needs, VA has invested heavily in delivering care for women Veterans that is effective, comprehensive, and gender tailored.

Ample research suggests that a sizeable proportion of women Veterans have yet to feel that VA is their “medical home.” Women Veteran non-VA users perceive VA care quality to be inferior, and the rate of attrition among women Veterans who seek VA care is alarming. To help address these critical gaps, we focused our efforts on improving women Veterans’ engagement and retention in VA care. We conceptualize engagement as “patients, families, their representatives, and health professionals working in active partnership at various levels across the healthcare system — direct care, organizational design and governance, and policy making — to improve health and health care.”1 In VA, promoting patient engagement may be especially useful in improving quality of care among high-risk or under-represented populations, such as women Veterans, especially those who might be isolated from care due to geography and other factors, such as disability.

EMPOWER QUERI 1.0
Since its inception in 2015, the Enhancing Mental and Physical health of Women through Engagement and Retention (EMPOWER) QUERI 1.0 team has focused on implementing gender-tailored, preference-based care models for women Veteran patients with high-priority health conditions. EMPOWER 1.0 studies found that women expressed preferences for gender-specific care and for virtual care. We also found that women Veterans saw benefits from participation in virtual care; for example, women who enrolled in the virtual gender-tailored Diabetes Prevention Program (DPP) had higher rates of participation (66 percent vs. 27 percent completed ≥ 9 sessions/modules) compared to those enrolled in in-person DPP. Overall, our findings across three interventions convinced our team and our operations partners that we need to increase access to virtual care and focus more intensively on prevention, especially given that women Veterans might be using VA across their lifespan.

EMPOWER QUERI 2.0
In EMPOWER 2.0, we have extended our overarching commitment to improving women Veterans’ engagement and retention in care by expanding access to virtual, evidence-based, preventive services for women Veterans across four VISNs. We continue to focus on women’s high-priority health conditions, specifically prediabetes, cardiovascular risk, and perinatal depression. In collaboration with our seven VA operations partners, we are supporting implementation of three evidence-based practices (EBPs): 1) gender-tailored DPP (to prevent diabetes), 2) Telephone Lifestyle Coaching (TLC, to prevent cardiovascular disease), and 3) Reach Out, Stay Strong Essentials (ROSE, to prevent perinatal depression).

DPP, an evidence-based lifestyle intervention emphasizing moderate weight loss, diet, and >150 minutes of physical activity per week, has been shown in randomized trials to prevent and/or delay progression to diabetes. Virtual DPP, which includes small, closed virtual groups and human coaches, is recommended by the CDC, meets U.S. Preventive Services Taskforce recommendations for care of persons at risk for diabetes, and adds to the menu of available VA weight management services. Developed by one of our operations partners, the National Center for Disease Prevention and Health Promotion (NCP), TLC is a theory-guided program involving virtual (telephone-based), individual-level, personalized health coaching focused on disease prevention and wellness. Pilot studies of TLC found strong engagement among women Veterans as well as statistically significant weight loss and high satisfaction among Veterans and VA staff. ROSE is an evidence-based intervention (studied in five randomized controlled trials) for preventing post-partum depression (PPD) among racially and ethnically diverse low-income women at high risk for PPD. In a systematic review of preventive interventions for perinatal depression in pregnant and post-partum women, the U.S. Preventive Services Taskforce found that ROSE reduced the relative risk of perinatal depression by 53 percent.

To support site implementation of these EBPs, we are using two well-established implementation strategies: Replicating Effective Practices (REP) and Evidence-Based Quality Improvement (EBQI). Within VISNs, sites are randomized to one of these strategies and we are evaluating several conditions, women expressed preferences for gender-specific care and for virtual care. We also found that women Veterans saw benefits from participation in virtual care; for example, women who enrolled in the virtual gender-tailored Diabetes Prevention Program (DPP) had higher rates of participation (66 percent vs. 27 percent completed ≥ 9 sessions/modules) compared to those enrolled in in-person DPP. Overall, our findings across three interventions convinced our team and our operations partners that we need to increase access to virtual care and focus more intensively on prevention, especially given that women Veterans might be using VA across their lifespan.

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Key Points

- While women Veterans are the fastest-growing segment of VA users, research indicates that many of them do not yet feel that VA is their medical home.
- The Enhancing Mental and Physical health of Women through Engagement and Retention (EMPOWER) QUERI 1.0 team implemented gender-tailored, preference-based care models for women Veteran patients with high-priority health conditions. EMPOWER 1.0 studies found that women expressed preferences for gender-specific care and for virtual care.
- EMPOWER 2.0 is supporting implementation of three evidence-based practices: 1) virtual gender-tailored Diabetes Prevention Program (DPP, to prevent diabetes), 2) Telephone Lifestyle Coaching (TLC, to prevent cardiovascular disease), and 3) Reach Out, Stay Strong Essentials (ROSE, to prevent perinatal depression).
outcomes related to engagement in care, as well as cost and return on investment. To date we have randomized 20 sites, interviewed 106 key stakeholders, trained 42 VA staff in EBOI, trained 39 VA staff in ROSE, and launched the EBPs in eight sites, with the remaining sites preparing for implementation. We have developed a Power BI dashboard for each site to understand site-specific population characteristics, explore performance measures, and monitor implementation. In addition, we support time-sensitive requests from our operations partners for rapid response projects; in fiscal year 2022, we conducted a qualitative evaluation of VA women’s mental health champions’ experiences and impacts of their roles for the Office of Mental Health and Suicide Prevention, and an evaluation of VA-provided childcare services for the Office of Women’s Health. We have also expanded

women Veterans have participated in at least one of these **Veteran Feedback Projects**, delivering actionable data in weeks instead of years. For example, in response to finding that one in four women Veteran primary care users experienced stranger harassment in VA, OWH requested annual Veteran Feedback Projects to monitor the effectiveness of VA’s efforts to end harassment. Results are also shared with participating VAs where they are used to impact local culture change efforts. They are also now reported to Congress as required by the Deborah Sampson Act.

Throughout this journey, we increasingly recognized the vital importance of integrating a **multilevel stakeholder engagement** focus to our work. Based on interviews with over 80 VA leaders, providers, researchers, and women Veterans, WHRN has tailored and disseminated new strategies and tools for vetting research plans and products with the many stakeholders in VA care delivery, including women Veterans. WHRN launched the **Women’s Improvement Network** to directly engage a diverse national panel of women Veteran VA users in the design, planning, execution, review, and dissemination of VA women’s health research.

We have also helped VA Central Office partner with VA researchers to complete **legislatively mandated studies**. For the National Defense Authorization Act, VA researchers at Salt Lake City examined post-9/11 women Veterans’ unemployment patterns and drivers. For the Deborah Sampson Act, VA researchers at the Connecticut VA engaged researchers from across the country to contribute data to better estimate the prevalence of intimate partner violence among Veterans, while researchers at the Durham and Greater Los Angeles VAs evaluated Veterans’ childcare needs and experiences to inform design of the Act’s mandated VA-wide childcare arrangements. These efforts were from this year alone. These accomplishments are the product of the engagement and labors of a highly collaborative national community of research and clinical colleagues with local, regional, and national operations partners collectively dedicated to using research to better the lives of women Veterans. This work would not have been possible without the service-mindedness of women Veterans themselves who step up not only as research participants but also engaged research partners. Through the power of partnership, we are making critical progress toward ensuring women Veterans receive the best evidence-based quality care available.

**References**


Innovation Update

Optimizing Virtual Modalities in VA to Enhance Healthcare for Women Veterans

Care for women Veterans is at a pivotal juncture. In 2020, Congress passed the Deborah Sampson Act, which requires the Veterans Health Administration (VA) to expand support and access to high-quality care for women Veterans. A fast growing subpopulation, women Veterans are more diverse and more likely to be single heads of households than their male counterparts. These characteristics have implications for women Veterans’ engagement in their own healthcare. Since the 1990s, VA has adapted care to address sex- and gender-based differences in health needs, preferences, and utilization patterns, resulting in increased satisfaction for women and decreased gender-based health disparities. Such adaptations include the establishment of women’s health comprehensive care clinics, identifying designated women’s health providers, and employing women Veteran project managers at every VA Medical Center. Yet, women Veterans continue to face unique logistical, cultural, and geographic challenges to receiving necessary healthcare. To overcome these barriers, VA needs to explore innovative means of providing care to women Veterans. Virtual care offers one such potential approach for women Veterans, who have already demonstrated eager uptake of virtual modalities, both before and during the COVID-19 pandemic.

Our project, CompreHEnsive ViRtual Care for WOmen VEterans (HEROES), seeks to identify barriers and facilitators to virtual, patient-centered VA healthcare for women Veterans and to implement strategies for optimizing its delivery. Our goal for HEROES is to generate an equity-focused guide that VA can integrate into existing and evolving telehealth infrastructures. To ensure sustainable solutions, we are working with a diverse team of health researchers, clinicians, and women Veteran patients. This four-year study is guided by Public Health Critical Race Praxis. We will employ participatory methods (e.g., Delphi method, human-centered design) to create a novel Implementation Blueprint. This blueprint maps evidence-based actionable steps that women’s health programs can use to guide how and when to deliver virtual care that promotes engagement and quality. We will then evaluate the blueprint and identify areas for further adaptation through a multiple methods evaluation.

References
women’s healthcare needs more visible in VA, implementing women’s healthcare services, and filling gaps in capacity. We remain focused on implementation and innovations, including enhancements in virtual care offerings, which will be further informed by results from the EMPOWER 2.0 QUERI Program. We are also focused on meeting Veteran family needs, through expansion of newborn care and implementing Veteran childcare assistance at every site. Differential effects of military service on women Veterans’ lives is also a priority, as questions of occupational and toxic exposures including and beyond burn pits arise, especially with passage of The Sergeant First Class Heath Robinson Honoring our Promise to Address Combat Trauma (SRCRTC) Act. We are also aware of gender differences in suicide risk and behavior, requiring gender-tailored approaches to screening and intervention. These gender differences shine a spotlight on the transition from active duty to Veteran status and what we can learn from women Veterans making this transition. Continued attention to care approaches that are sensitive to the spectrum of gender identities and sexual orientations is also essential.

Throughout, our quest to deliver comprehensive women’s healthcare devoid of disparities in access and quality, in safe, secure, and welcoming environments has never wavered. Our many partnerships with VA researchers in these priority areas will continue to ensure we deliver the best care everywhere.

References

We also asked about current practices and preferences for menopause symptom management. Survey respondents reported lifestyle changes (e.g., physical activity, mind-body approaches, 44 percent), followed by pharmacological treatment (prescribed medications, 31 percent; menopausal hormone therapy, 19 percent). While little is known about the potential efficacy, harms, and/or benefits of cannabis use to manage menopause symptoms, almost 30 percent of women Veterans reported this approach. Survey responses highlighted opportunities for growth in the provision of menopause-related care in the VA setting. Only 22 percent of respondents reported currently or ever receiving menopause-related care from their VA providers, while 41 percent reported that they were not, but would like to.

The importance of menopause-related care in VA, as well as current gaps in availability, was also highlighted in qualitative interviews with midlife women Veterans and VA primary care providers across the country (manuscripts in progress). In brief, Veterans described feeling unprepared for the menopause transition and highlighted a desire for support and evidence-based, trustworthy information on menopause and menopause symptoms from their VA primary care providers. They also expressed interest in more peer support for menopause-related concerns, and a preference for non-pharmacological treatment options. Both Veterans and providers highlighted sexual dysfunction and urinary symptoms as an important but under-discussed issue for women in and after the menopause transition. Consistent with past research in community settings, providers cited a need for educational resources and a lack of formal training in menopause management.

Future Directions
Our work identifying menopause-related information in the EHR highlighted the need and opportunity to develop means of classifying menopause status within this resource. Working with partners at the VA Informatics and Computing Infrastructure (VINCI), we developed a hybrid algorithm that classifies menopause status at a target date using structured (e.g., ICD codes) and unstructured (e.g., last menstrual period date documented in chart notes) electronic health record data. This algorithm is currently published in the VA Centralized Interactive Phonemics Resource (CIPHER), and the resulting menopause status variable is now available in the COVID-19 Shared Data Resource for research and operations. We hope to build on this work, applying the algorithm on a larger scale to examine age at menopause, menopause-related health and healthcare changes, and menopause-related treatment decisions.

Using findings from the studies described above and a participatory research process with midlife women Veterans, we developed a Veteran-centered, menopause-focused psychoeducation and symptom tracking mobile application prototype. We are in the process of conducting a user study to assess the feasibility, usability, and relative validity of the tool, and will add updates and refinement for future efforts to promote collaborative self-management and/or ambulatory data collection. Findings about cannabis use for menopause management have also sparked new lines of research to investigate patterns of use as well as potential risks and benefits for these practices among midlife and older women. Finally, we are using the survey and qualitative data from this study to identify patient needs and preferences, gaps, and best practices, to develop and evaluate resources to advance gender-sensitive menopause-related care in the VA setting.

“Women” used for brevity; to include women and gender-diverse individuals.

References
• Nearly all providers said they welcome informed patients who have reviewed decision aids prior to appointments.

**Veteran perspectives.** We also sought Veteran input by presenting our products and research goals to men and women Veterans in a VA consumer group (N=9). These Veterans reported:

• A desire to be liked and respected by their providers.
• A reluctance to “tell my doctor what to do,” despite positively endorsing the idea of being an empowered care partner with their provider.
• A common preference to avoid MH care and associated stigma.
• Awareness of Veteran peers who need MH care and who find VA difficult to access.
• Interest in SDM training and knowing that their VA provider would be trained.
• Emphatic preferences for animated SDM training videos, not lectures.

**Project Status and Next Steps**

Collectively, these findings reaffirmed the need to support Veterans’ VA access through existing virtual platforms; and that SDM training and decision aids are needed, feasible, and welcomed. These findings guided development of processes and materials for our current implementation study phase. Specifically, we have:

1. Developed one-page decision aids for PTSD, depression, and alcohol use disorder.
2. Modified our WEB-ED interface to include questions and tailored educational modules responsive to current Veteran needs, e.g., suicide prevention, social determinants of health, and social isolation.
3. Increased our effort to assist Veterans with online VA enrollment and support Veterans to share their MH screening results with their providers.
4. Shortened our SDM training videos and made them available online for those in the intervention group.
5. Added a provider training video demonstrating a clinical encounter with and without the use of SDM for a complex and acutely symptomatic woman Veteran.

We are following the subsequent care, experiences, and satisfaction of both Veterans and providers in the intervention group who have received these materials and support, as well as those in the comparison group who have received WEB-ED alone. We anticipate that our products can be readily implemented, are cost-effective and, with partner collaboration, can be successfully integrated into VA systems.

Anecdotally, the COVID-19 pandemic interrupted this research for several months. Both Veterans and providers have acknowledged overload and other negative impacts on their willingness to participate. However, many Veterans have expressed gratitude for research that addresses the MH needs of returning war Veterans and VA care linkage. Further, rapid and widespread adoption of telemedicine by VA leadership has demonstrated the benefit of virtual care and has normalized this health services delivery option.

**References**