

VA Pregnancy and Maternity Care Research

The number of pregnant Veterans using Veterans Affairs (VA) maternity care coverage increased over 14-fold between the years 2000 and 2015.¹ Research on Veteran pregnancy and maternity care has increased in parallel. Findings show that pregnant Veterans who use VA coverage have elevated rates of trauma exposure and mental health conditions that increase risk for pregnancy complications and adverse maternal and infant outcomes. Veterans using VA coverage may experience challenges to accessing and coordinating care during and after pregnancy. Ongoing research focuses on identifying interventions and supports that increase access to comprehensive care and mitigate risk factors.

Key Findings

Veterans using VA-covered maternity care are a high-risk population

- Veterans have elevated rates of pregnancy complications (e.g., gestational diabetes, hypertensive disorders of pregnancy) compared to the general population²
- Veterans using VA-covered maternity care have increased risk for adverse outcomes (e.g., Cesarean section deliveries, neonatal intensive care unit admissions) compared to Veterans using other coverage³
- Elevated rates of adverse maternal and infant outcomes among Veterans using VA-covered maternity care may be due to high prevalence of mental health conditions³

PTSD and depression have adverse impacts on Veteran maternal and infant outcomes

- Many pregnant Veterans have histories of trauma, including military sexual trauma, combat violence, and intimate partner violence, increasing risk for developing posttraumatic stress disorder (PTSD) and depression
- PTSD during pregnancy is associated with a 35% increased risk of preterm birth, 40% increased risk of gestational diabetes, and 30% increased risk of preeclampsia^{4,5}
- Depression during pregnancy affects an estimated 28% of Veterans⁶ and is associated with increased risk for postpartum depression and poor mother-infant bonding^{7,8}

Veterans' maternity care is complicated by transitions between VA and community providers

- Veterans using VA-covered maternity care receive obstetric (e.g., prenatal) care from non-VA community providers but continue to receive other (e.g., mental health) care from VA providers
- Nearly one-third of pregnant Veterans report that they were unable to access VA-covered prenatal care as soon as they would have liked,⁹ citing authorization processes and paperwork as common barriers¹⁰
- Most pregnant Veterans with mental health conditions receive VA mental health treatment, highlighting a need for collaboration between VA mental health providers and community obstetricians¹¹

Veterans of color experience disparities in pregnancy outcomes and care

- Veterans of color (approximately 50% of women Veterans aged 18-44 using VA care)¹ are nearly twice as likely as White Veterans to have Cesarean section deliveries¹²
- Black, Asian, and Native Hawaiian/Pacific Islander Veterans are less likely than non-Hispanic White Veterans to report timely access to prenatal care⁹ and re-engagement in VA primary care following childbirth¹³
- More research is needed to explore how racial and ethnic disparities in Veteran pregnancy outcomes may be explained by social, economic, cultural, and environmental factors, including impacts of structural racism^{12, 13}

Ongoing work focuses on improving comprehensive care during and after pregnancy

- VA Maternity Care Coordinators serve as liaisons between community obstetricians and VA providers and connect Veterans with pregnancy-related services and resources¹⁴
- Over 95% of Veterans who used the VA maternity care coordination program found it helpful, especially for understanding maternity benefits and obtaining pregnancy-related supplies (e.g., breast pumps)¹⁵
- Additional work is needed to leverage care coordinators and identify other supports to increase timely access to prenatal care, educate community obstetricians about Veteran needs, ensure coordination between mental health and obstetric care, and reduce racial and ethnic disparities

Currently Funded VA Pregnancy and Maternity Care Research Projects

Examining pre-pregnancy health and maternal outcomes among women Veterans (Deirdre Quinn, PhD, MSc; HSR&D-funded Sep 2021- Aug 2026). This project examines the impact of pre-pregnancy health risks on maternal outcomes; examines women Veterans' pre-pregnancy healthcare needs, experiences, and preferences; and develops a patient-centered pre-pregnancy health intervention. *For more information:* deirdre.quinn@va.gov

A comprehensive assessment of maternal health and pregnancy outcomes among women Veterans (Ciaran Phibbs, PhD, MA; HSR&D-funded Apr 2022- Mar 2025). This project examines maternal and infant outcomes in Veterans covered by VA insurance and Veterans covered by Medicaid and compares Veteran pregnancy outcomes with those of the general population. *For more information:* ciaran.phibbs@va.gov

Engaging Veterans in developing an intervention to address racial disparities in Cesarean sections (Kristin Mattocks, PhD, MPH; HSR&D-funded May 2022- Oct 2023). This study will examine the social and clinical factors leading to Cesarean section deliveries among Veterans of color and test the feasibility of doula services to enhance VA maternity care. *For more information:* kristin.mattocks@va.gov

Enhancing Mental and Physical Health of Women through Engagement and Retention (EMPOWER) QUERI 2.0 (Alison Hamilton, PhD, MPH; QUERI-funded Oct 2021- Sep 2026). This program evaluates the implementation of three preventive evidence-based practices, including Reach Out, Stay Strong Essentials (ROSE), designed to prevent perinatal depression. *For more information:* alison.hamilton@va.gov

References

1. Frayne SM et al. [Sourcebook: Women Veterans in the Veterans Health Administration](#). Vol 4. Longitudinal trends in sociodemographics, utilization, health profile, and geographic distribution. In: Women's Health Evaluation Initiative, Women's Health Services, Veterans Health Administration, Washington, DC. 2018.
2. Katon J et al. [Gestational diabetes and hypertensive disorders of pregnancy among women Veterans deployed in service of operations in Afghanistan and Iraq](#). *J Women's Health*. 2014.
3. Shaw JG et al. [Selection of higher risk pregnancies into Veterans Health Administration programs: Discoveries from linked Department of Veterans Affairs and California birth data](#). *Health Serv Res*. 2018.
4. Shaw JG et al. [Posttraumatic stress disorder and risk of spontaneous preterm birth](#). *Obstet Gynecol*. 2014.
5. Shaw JG et al. [Post-traumatic stress disorder and antepartum complications: a novel risk factor for gestational diabetes and preeclampsia](#). *Paediatr Perinat Epidemiol*. 2017.
6. Kroll-Desrosiers AR et al. [Rates and correlates of depression symptoms in a sample of pregnant veterans receiving Veterans Health Administration care](#). *Women's Health Issues*. 2019.
7. Creech SK et al. [The impact of military sexual trauma on parent-infant bonding in a sample of perinatal women Veterans](#). *Depress Anxiety*. 2022.
8. Gross GM et al. [A longitudinal investigation of military sexual trauma and perinatal depression](#). *J Women's Health*. 2020.
9. Mattocks KM et al. [Factors impacting perceived access to early prenatal care among pregnant Veterans enrolled in the Department of Veterans Affairs](#). *Women's Health Issues*. 2019.
10. Katon JG et al. [Women Veterans' experiences with Department of Veterans Affairs maternity care: current successes and targets for improvement](#). *Women's Health Issues*. 2018.
11. Shivakumar G et al. [Patterns of treatment utilization across the perinatal period in the Center for Maternal and Infant Outcomes and Research in Translation \(COMFORT\) Veterans study](#). *J Women's Health*. 2021.
12. Mattocks KM et al. [Racial differences in the Cesarean section rates among women Veterans using Department of Veterans Affairs community care](#). *Med Care*. 2021.
13. Shankar M et al. [Postpartum transition of care: racial/ethnic gaps in Veterans' re-engagement in VA primary care after pregnancy](#). *Women's Health Issues*. 2021.
14. Cordasco KM et al. [Care coordination for pregnant Veterans: VA's maternity care coordinator telephone care program](#). *Transl Behav Med*. 2018.
15. Mattocks KM et al. [Implementing and evaluating a telephone-based centralized maternity care coordination program for pregnant Veterans in the Department of Veterans Affairs](#). *Women's Health Issues*. 2017.

For More Information on:

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