

VA WOMEN'S HEALTH RESEARCH NETWORK (WHRN)

VA HSR&D Service Directed Research (Project #10-012)

Executive Summary (January 2018)

Background and Rationale

Women Veterans' rapid growth among VA users has escalated demand for a stronger evidence base to better understand and systematically improve access to, quality of, and outcomes of their care. VA Health Services Research & Development (HSR&D) Service has become a leader in increasing attention to women's inclusion in VA research and building capacity to increase the conduct of women's health research to address critical knowledge gaps. The VA Women's Health Research Network (WHRN) is among HSR&D's special initiatives to systematically transform VA's capacity to examine and reduce gender disparities in health and health care and use research to increase delivery of evidence-based care tailored to women Veterans' needs.

Objectives of the VA Women's Health Research Network (WHRN)

WHRN was initially funded by HSR&D in 2010, following several years of systematic development of the VA's Women's Health Research Agenda that spanned all four Services of the VA Office of Research & Development.¹ WHRN's initial objectives (2010-2013) were to (1) build capacity in VA women's health research by developing a **national Consortium of VA researchers** and arming them with the knowledge, skills and resources necessary to successfully design and conduct women Veterans' health research, and (2) develop, implement and test a **VA Women's Health Practice Based Research Network (WH-PBRN)** to facilitate recruitment of women Veterans in VA research by establishing a ready-to-use infrastructure of partnered VA healthcare facilities enabling investigators to access enough women Veterans, their providers and their care settings. Together, the Consortium and Women's Health PBRN enable conduct of high-priority research on gender differences and women Veteran-specific issues.



In three short years, WHRN met or exceeded all of its deliverables...

WHRN's **Consortium** work focused on methodological and women Veterans-focused education and training through national cyber-seminars and small group sessions; building capabilities and collaboration through technical support, mentorship and research development around high-priority research topics; increasing dissemination; and accelerating implementation of research into practice by enhancing research-clinical partnerships. Over 250 VA investigators and clinicians joined the Consortium, with broad participation in over 30 national cyber-seminars. With a target of 10+ research proposal *submissions*, **WHRN helped 29 women's health-related grants actually get funded**. Similarly, while HSR&D hoped to see at least 20 peer-reviewed scientific manuscripts published on women Veterans' research, **WHRN oversaw 2 VA-funded journal supplements²⁻³ devoted to women Veterans' health and health care that delivered 40 papers**, not counting many other WHRN-supported publications published elsewhere, markedly expanding the scientific literature. National mentors were identified to meet the needs of the growing group of young investigators interested in VA women Veterans' research, including post-doctoral fellows and VA HSR&D Career Development Awards (akin to NIH's K Awards

¹ Yano EM, Bastian L, Frayne S, et al. Toward a VA women's health research agenda: Setting evidence-based priorities to improve the health and health care of women veterans. *J Gen Intern Med.* 2006;21(Suppl 3):S93-101.

² Yano EM, Frayne, SM. Health and health care research among women veterans and women in the military: Research informing evidence-based practice and policy (*Commentary*). *Women's Health Issues.* 2011;21(4 Suppl):S64-S66.

³ Bastian LA, Bosworth HB, Washington DL, Yano EM. Setting the stage: Research to inform practice, policy and interventions to improve women veterans' health and health care. *Editorial. J Gen Intern Med.* 2013;28(Suppl 2):S491-S494.

for promising junior investigators) in key areas (e.g., intimate partner violence, substance use disorder treatment). WHRN organized a **National VA HSR&D Women's Health Services Research Conference (2010)**, which convened national VA policy leaders and VA women's health researchers, as well as leaders from the Institute of Medicine, U.S. Departments of Defense, Health & Human Services (including NIH leaders), Justice, and Labor, among others, to learn about women Veterans' research. Participants also came to 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.⁴

Concurrently, WHRN's **WH-PBRN** developed the procedures and multilevel partnerships necessary to prepare member sites to participate in VA women's health research, including establishment of local VA Site Leads and procedures for engaging frontline providers, clinic staff, managers and leaders in research planning and conduct.⁵ The first four "founder" VA sites (Palo Alto, Los Angeles, Durham, Iowa City) tested PBRN capabilities in patient-, provider- and practice-level data collection through *Implementation Evaluation Projects*. Within the 1st year of operation, the WH-PBRN launched a **primary care practice-based study of women Veterans' preferences for gender-sensitive mental health care**.⁶ By the 2nd year, WHRN collaboratively developed and launched a **4-site cluster randomized trial of an evidence-based quality improvement approach to implementing gender awareness training among VA providers and staff**.⁷⁻⁸ While expansion was planned for at least two sites by the 3rd year, demand for participation far exceeded expectations, yielding a **nearly 10-fold growth to 37 VA facilities**.

Together, the Consortium and WH-PBRN accelerated research production through the "pipeline," developing new interventional and implementation research initiatives focused on women Veterans' health, which were far and few between prior to WHRN funding. First among these was the HSR&D-funded **Women Veterans' Healthcare CREATE Initiative**, a partnered research program of five studies developed collaboratively to use research to accelerate implementation of comprehensive care for women Veterans.⁹ The CREATE relied on the WH-PBRN to facilitate recruitment of sites, providers and women Veterans, and is near completion. WHRN's successes led to its mention in the **VA Blueprint for Excellence** as key to *advancing innovations in women Veterans' health care*.

Building on the Successes of the VA Women's Health Research Network: "WHRN 2.0"

To continue to increase the equitable benefits of VA research through greater inclusion of women Veterans in VA research, VA HSR&D Service renewed WHRN, leveraging knowledge gained from the first phase of WHRN's efforts to further develop the national Consortium of VA researchers alongside the capabilities of the Women's Health PBRN. WHRN increased emphasis on **accelerating interventions, implementation and high-impact (I³) research**.

Learning from early use of the WH-PBRN, WHRN leaders added a new objective to systematically identify **barriers to and facilitators of effective multilevel engagement in VA women's health research** through qualitative inquiry with VA leaders, providers, researchers and women Veterans themselves. **WHRN 2.0 (2014-2016)** continued

⁴ Yano EM, Bastian L, Bean-Mayberry B, Eisen S, Frayne SM, et al. Using research to transform care for women veterans: Advancing the research agenda and enhancing research-clinical partnerships. *Women's Health Issues*. 2011;21(4 Suppl):S73-S83.

⁵ Frayne SM, Carney DV, Bastian L, et al. The VA women's health practice-based research network: Amplifying women veterans' voices in VA research. *J Gen Intern Med*. 2013;28(Suppl 2):S504-S509.

⁶ Kimerling R, Bastian LA, Bean-Mayberry BA, Bucossi MM, Carney DV, Goldstein KM, Phibbs CS, Pomernacki A, Sadler AG, Yano EM, Frayne SM. Patient centered mental health care for women Veterans. *Psychiatr Serv*. 2015 Feb 1;66(2):155-162.

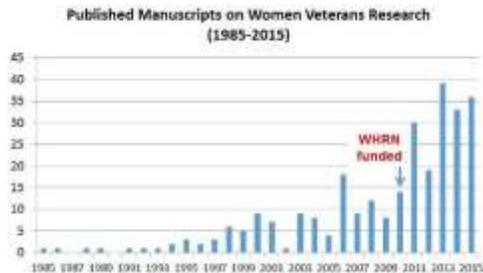
⁷ Fox AB, Hamilton AB, Bean-Mayberry B, et al. Evaluation of an evidence-based quality improvement approach to enhance impact of employee training in the VA health care setting. *J Contin Educ Health Prof*. 2016 Spring;36(2):96-103.

⁸ Goldstein KM, Vogt D, Hamilton AB, et al. Practice-based research networks add value to evidence-based quality improvement. *Healthcare*. July 12 2017. [Epub ahead of print]. Doi: 10.1016/j.hjdsi.2017.06/008.

⁹ Yano EM. A partnered research initiative to accelerate implementation of comprehensive care for women Veterans: The VA Women's Health CREATE. *Med Care*. 2015 Apr;53(4 Suppl 1):S10-14.

research development in each strategic priority area, supporting grant proposal development among **Consortium** members, further increasing emphasis on interventions and implementation science. For example, a randomized trial was launched to evaluate impacts of tailoring VA's patient-centered medical home model (PACT) to the needs of women Veterans, while a stepped wedge trial of virtual education and electronic consults with expert women's health providers was started to study impacts on provider proficiency in VA community-based outpatient clinics.

Over a dozen new VA HSR&D Career Development Awardees were also funded, including new researchers focused



on women Veterans' cardiovascular risk reduction, preconception care, and maternity care quality, among others. **Two more VA journal supplements** were produced, in *Medical Care* and *The Gerontologist*, the latter transforming knowledge of older women Veterans' health needs via data from 3,700+ women Veterans enrolled in the *Women's Health Initiative*.¹⁰⁻¹¹ The scientific literature focused on women Veterans has continued to grow substantially since WHRN was funded.

In parallel, the **WH-PBRN nearly doubled in size to a total of 60 VA medical centers**, expanding the Network's reach for multisite research, program evaluation, and quality improvement in increasingly representative facility types and regions. Given **growing expertise in recruiting women Veterans into VA research**, the WH-PBRN was additionally funded to systematically evaluate factors related to optimizing women's enrollment in a new comparative effectiveness trial of PTSD treatment (CSP #591). By 2016, 29 multisite projects had been funded across 37 WH-PBRN sites.



WHRN contributed to development of the first VA Quality Enhancement Research Initiative (QUERI) Program focused on **Enhancing Mental & Physical health of Women through Engagement & Retention (EMPOWER)**.¹² EMPOWER is enhancing VA capacity to calibrate services to Veteran preferences through multilevel stakeholder engagement in three projects that gender-tailor VA care for depression and anxiety, cardiovascular risk reduction, and diabetes prevention.

Extension of WHRN to Accelerate Interventions, Implementation & High-Impact Research

As WHRN continued to support achievement of VA's women's health research agenda, VA HSR&D Service extended funding for **two more years (2016-18)** to continue key functions (e.g., cyber-seminars, researcher training, technical support for collaborative research development, and building WH-PBRN Site Leads skills). At the same time, WHRN began pilot testing strategies for **supporting VA as a learning healthcare system** and increasing employee engagement in sustainable research-clinical partnerships capable of generating and acting on research evidence to improve care and respond to high-priority needs. For example, WHRN rapidly developed a **women Veterans' suicide prevention work group** to consolidate efforts to generate high-quality research and educate researchers on risks and resiliency factors. WHRN is also leveraging an **updated VA "evidence map"**¹³ to create an updated series of research summaries in areas such as reproductive health, substance use disorders, and trauma, and to review and follow-up on 100s of published papers that included women Veterans but never reported on their results. In parallel, WHRN is evaluating **inclusion of women in VA clinical trials**. WHRN has established a methods group to examine the utility of

¹⁰ Bastian LA, Mattocks KM, Rosen AK, Hamilton AB, Bean-Mayberry B, Sadler AG, Klap RS, Yano EM. Informing policy to deliver comprehensive care for women Veterans. *Med Care*. 2015 Apr;53(4 Suppl 1):S1-S4.

¹¹ Bastian LA, Hayes PM, Haskell SG, Atkins D, Reiber GE, LaCroix AZ, Yano EM. Improving our understanding of health issues in older women Veterans: What can we learn from secondary analyses? *The Gerontologist*. 2016;56(S1):S10-S13.

¹² Hamilton AB, Farmer MM, Moin T, et al. Enhancing Mental and Physical health Of Women through Engagement and Retention (EMPOWER): A protocol for a program of research. *Implement. Sci*. 2017 Nov 7;12(1):127.

¹³ Danan ER, Krebs EE, Ensrud K, Koeller E, MacDonald R, Velasquez T, Greer N, Wilt TJ. An evidence map of the women Veterans' health research literature (2008-15). *J Gen Intern Med*. 2017;31(12):1359-76.

novel methods for integrating information from a large number of studies with small numbers of women Veterans. A **VA journal supplement** focused on such results is underway as an approach to incentivize such publication.

The **WH-PBRN** has also continued to expand its “toolkit” working with VA facilities, including **rapid “scans” of how care is delivered** in its 60-member sites (e.g., where are mammograms offered, what kinds of activities are underway to reduce harassment on campus). Results provide useful background information for researchers and operations leaders alike. Through “card studies” that use a simple, anonymous Veteran Feedback Form format, we are also **using the WH-PBRN to rapidly gauge women Veterans’ preferences for care**; more than 30 sites have participated in a card study, and the first two card studies (on complementary and integrative health care, and on stranger harassment of women while on VA grounds) *each collected more than 1,000 forms from women Veterans within just two weeks.*

The **WH-PBRN is also becoming a testing ground for implementing and spreading evidence-based practice.** For example, one of the HSR&D-funded trials that tested an *evidence-based quality improvement (EBQI) approach* to tailoring PACT to meet women Veterans’ needs in the WH-PBRN demonstrated substantial gains in a wide-range of quality gaps. With the help of EBQI, *participating VAs increased access to women’s primary care providers, enhanced PACT team function, and improved trauma-sensitive care, among a host of other improvements.* WHRN leaders are working together with WH-PBRN Site Leads to **take this research-tested strategy to scale in cost-effective ways.**

WHRN is also working to get **rapid feedback on the feasibility and usefulness of interventions before significant resources are spent testing them in larger trials.** For example, before widely testing promising innovations for improving delivery of VA trauma-sensitive care in a large trial, VA researchers obtained modest funding to refine the options with women Veteran and subject matter expert input. Innovation options were then presented to the full national WH-PBRN Site Lead community for interactive and “real time” polling feedback, making it possible to canvas front-line providers’ perspectives nationally in a matter of weeks to months instead of years.

Building on over 100 interviews with VA researchers, providers, leaders and women Veterans themselves, WHRN is also working to **tailor and disseminate new strategies and tools for vetting research plans and products with the many stakeholders in VA care delivery.** We have established a **Women Veterans Improvement/Innovation Network (WIN)** to further engage women Veterans who use the VA in the design, planning, execution, and dissemination of VA research findings, while also **making it easier to recruit women in VA research** so they equitably benefit from research findings. Few VA facilities have groups that involve women Veterans in research directly, but WIN will ultimately span the WH-PBRN, providing ready access to diverse women Veterans’ ideas and perspectives.

Who leads WHRN?

WHRN is collaboratively led by three investigators who, respectively, oversee the Consortium, WH-PBRN and engagement work. **Elizabeth Yano, PhD, MSPH** (elizabeth.yano@va.gov) leads national Consortium development. At VA Greater Los Angeles, Dr. Yano is also Director of the VA HSR&D Center for the Study of Healthcare Innovation, Implementation & Policy, Director of the VA Women Veterans’ Healthcare CREATE, and Professor of Health Policy & Management, UCLA Fielding School of Public Health. **Susan Frayne, MD, MPH** (susan.frayne@va.gov) leads the WH-PBRN. At VA Palo Alto, Dr. Frayne also directs the VA Women’s Health Evaluation Initiative, and is an Investigator at the VA HSR&D Center for Innovation to Implementation and Professor of Medicine, Stanford University. **Alison Hamilton, PhD, MPH** (alison.hamilton@va.gov) leads the multilevel engagement work. Also at VA Greater Los Angeles, Dr. Hamilton is Director of the VA EMPOWER QUERI Program, and Research Anthropologist, Department of Psychiatry & Biobehavioral Sciences, UCLA Geffen School of Medicine. WHRN work is supported two Program Managers, **Ruth Klap, PhD** (ruth.klap@va.gov), whose expertise in health services research methods and inclusion of women in research advances the capabilities of the Consortium, and **Diane Carney, MA** (diane.carney@va.gov), whose longstanding multisite research and project management experience ensures the effective management of the 60-site WH-PBRN.