HSR Priority Research Areas
(Updated March 22, 2024)

A. Summary of Updates:

The Health Systems Research (HSR) priority areas have been <u>broadened</u> to reflect methodologies that are considered essential to HSR, and include outcomes relevant to Veterans and other VA partners. The principal reason for the update is to emphasize HSR's unique scientific contributions to VA and Office of Research and Development (ORD's) missions; and to promote investment of cutting-edge, multi-disciplinary, systems-focused research reflecting a Learning Health System approach in the wake of ORD's reorganization. <u>These broader HSR priorities (strategic methodology areas), are already reflected in the HSR RFAs as cross-cutting methods and represent HSR-specific strategic methodology areas:</u>

1. <u>Implementation science</u>: Discover and optimize strategies to get effective treatments to Veterans faster and sustain their use in real-world practice.
2. <u>Data Science</u>: Design, validate, and apply data science and knowledge management tools that improve Veteran care.
3. <u>Engagement Science</u>: Create and test novel approaches for engaging end-users, e.g., Veterans, providers, communities, etc., that support improved outcomes.
4. <u>Systems Science</u>: Design and apply new systems science methods, including to improve Veteran provider workforce effectiveness, satisfaction, diversity, and retention.
5. <u>Policy Analysis/Evaluation</u>: Develop, assess, and improve VA and national policies to improve Veteran outcomes, with a focus on underserved populations.

HSR strategic methodology areas (see Figure below) are based on the Patient-Centered Outcomes Research Institute [(PCORI) Methodology Standards,](#) the Agency for Healthcare Research and Quality (AHRQ) [Learning Health System Core Competencies](#), the [VA Quality Enhancement Research Initiative (QUERI) Roadmap](#), and recommendations from the [National Academy of Medicine's Future of Health Services Research](#) report. They also encompass the Learning Health System framework (e.g., [Friedman, 2022](#), [Lannon et al., 2020](#)), which is being adopted across ORD to promote a repeatable systematic, and data-driven approach to generate and use research to support Veteran health improvement.

<u>The following HSR topics not explicitly described in the strategic methodology areas remain:</u>
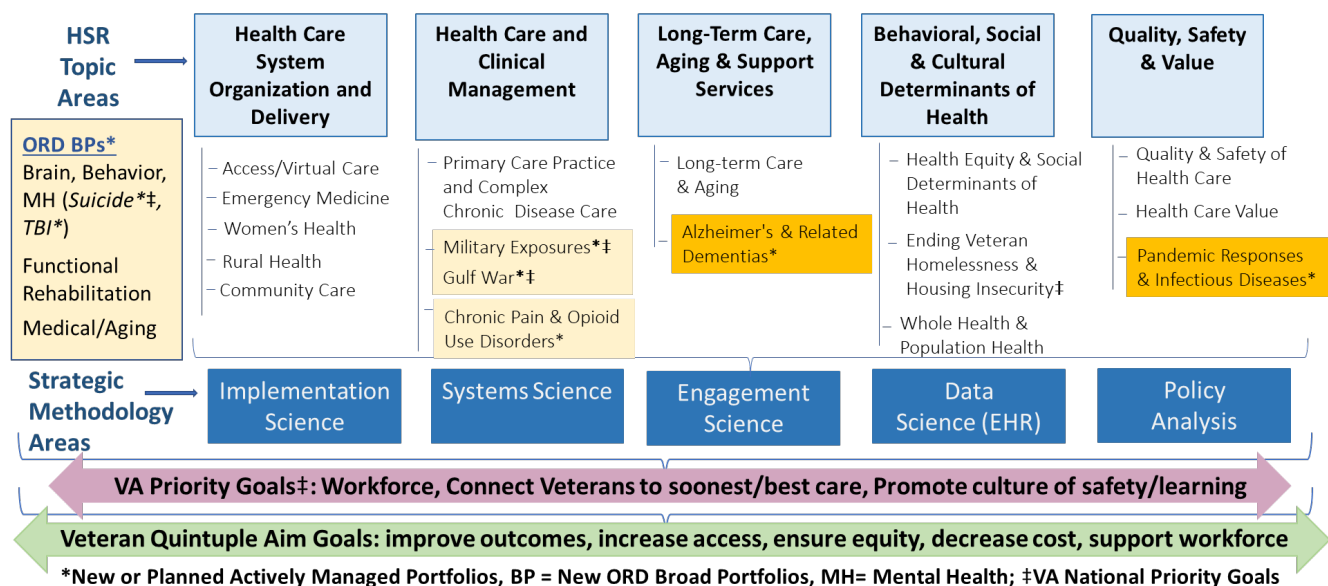- Health Care System Organization and Delivery (Access, Emergency Medicine, Women's Health)
- Mental and Behavioral Health, including Suicide Prevention
- Health Care and Clinical Management (Primary Care Practice and Complex Chronic Disease Management, Disabilities and Military Exposure, Opioid/Pain)
- Long-Term Care, Aging and Support Services
- Behavioral, Social and Cultural Determinants (Health Equity, Whole Health)
- Quality, Safety and Value

<u>The following priority areas have been added based on VA/VHA leadership and legislative priorities:</u>
- Homelessness, housing and economic security (VA Strategic Plan)
- Workforce- practitioner experience, well-being, and retention (VHA Long-Range Goals)
- High-reliability- culture of safety, learning, and knowledge translation (VHA Long-Range Goals)
- Policies related to Veterans benefits and impact on health (VA Strategic Plan)

<u>How HSR strategic methodology areas relate to the current VA priorities:</u> HSR prioritizes research studies that address at least one of the above-mentioned strategic methodology areas (implementation science, data science, engagement science, systems science, policy analysis) and also reflect impacts on Quintuple Aim goals ([Matheny, NAM 2019;](#) [Cahan, 2020](#); [Nundy 2021](#)): improve outcomes/quality/safety, increase access, ensure equity, improve value/decrease cost, and/or support workforce. HSR research studies should also demonstrate alignment with VA national priority goals, as described below.

HSR Strategic Methodology Areas Are Foundational to Current HSR Topics, Quintuple Aim Goals, and VA National Priorities

HSR Topic Areas →

Health Care System Organization and Delivery	Health Care and Clinical Management	Long-Term Care, Aging & Support Services	Behavioral, Social & Cultural Determinants of Health	Quality, Safety & Value
– Access/Virtual Care – Emergency Medicine – Women's Health – Rural Health – Community Care	– Primary Care Practice and Complex Chronic Disease Care Military Exposures*‡ Gulf War*‡ Chronic Pain & Opioid Use Disorders*	– Long-term Care & Aging Alzheimer's & Related Dementias*	– Health Equity & Social Determinants of Health – Ending Veteran Homelessness & Housing Insecurity‡ – Whole Health & Population Health	– Quality & Safety of Health Care – Health Care Value Pandemic Responses & Infectious Diseases*

ORD BPs*
Brain, Behavior, MH (*Suicide*‡, *TBI**)
Functional Rehabilitation
Medical/Aging

Strategic Methodology Areas →

Implementation Science	Systems Science	Engagement Science	Data Science (EHR)	Policy Analysis

VA Priority Goals‡: Workforce, Connect Veterans to soonest/best care, Promote culture of safety/learning

Veteran Quintuple Aim Goals: improve outcomes, increase access, ensure equity, decrease cost, support workforce

*New or Planned Actively Managed Portfolios, BP = New ORD Broad Portfolios, MH= Mental Health; ‡VA National Priority Goals

Background: How HSR Strategic Methodology Areas Support National VA Priorities

The U.S. Department of Veterans Affairs (VA)'s Health Systems Research (HSR's) mission is to improve Veteran health by developing, testing, and implementing strategies that improve the organization, delivery, and effectiveness of health care and related services for Veterans. HSR funds studies that examine the organization, financing, management, and delivery of health care; the social determinants of health and health care; and their effects on the access, quality, safety, equity, value, and experience of care delivered to Veterans. HSR studies address a wide range of priorities articulated by multi-level partners at the national, regional, and local levels with a focus on health care services, delivery models, and policies that are available or feasible in regular clinical settings.

The "laboratory" for HSR studies is the real world, including the Veterans Health Administration (VA)'s over 170 hospitals, 1,000+ clinics and long-term care facilities, as well as the multiple services paid for by VA's different branches (e.g., Veterans benefits, community or purchased care). The national scope of the VA healthcare system provides several unique opportunities for HSR investigators:

- Using natural variation across the system to uncover factors influencing Quintuple Aim goals (improve outcomes, including quality and safety of health care, increase access, ensure equity, decrease cost, and support workforce).
- Testing interventions delivered by existing providers in multiple settings in real world conditions.
- Studying the process of taking innovations to scale.
- Leveraging the rich clinical and administrative data on the 9 million patients enrolled in VA.
- Engaging partners in the design and conduct of research that addresses their priorities, including operational and program leaders, managers, and frontline employees, as well as Veterans, family members, and their caregivers.

HSR strategic methodology areas reflect emerging trends described in National Academy of Medicine's Future of Health Services Research report that affect Veteran and general population health, e.g.,

- **Rapid growth of new technologies** (e.g., virtual care, mobile health) enabling care delivery beyond the clinic walls as well as the rapid expansion of big data (e.g., artificial intelligence)
- Increased desire from **patients and families** to be involved in health care decisions
- Increased need to address the role that **social determinants** play in health and health equity
- Greater **demand from health care leaders** to show how research improves quality of care
- Changing **laws and policies** regulating health care, and the challenge of making these policies work at the health system and community levels for patients.

In contrast to quality improvement, HSR strategic methodology areas create generalizable knowledge to make a broader impact on not only the Veteran population or service setting of interest, but in the general field of health systems research (See Table below). To this end the following general principles apply to HSR studies:

1. Questions should be informed by existing VA and relevant non-VA data, and research should be focused on priority areas for improvement, including those affecting selected sub-populations or regions, using interdisciplinary methods (e.g., quantitative, qualitative, mixed-methods data, survey research, data modeling, evidence syntheses, etc.).
2. Research approaches need to address gaps in care due to (a) insufficient knowledge about effective practices, (b) difficulty accessing or implementing evidence-based practices, or (c) organizational barriers that impede implementation of effective practices (e.g., hiring).
3. Appropriate comparison groups should be used to ensure representativeness and generalizability especially when testing hypotheses related to new organizational changes, technologies, policies, or implementation strategies (e.g., studies involving impact of the new electronic health record or other information technologies without comparison to legacy software or services, implementation studies that only involve highly resourced settings).
4. Solutions should be able to be integrated as much as possible into existing care, rather than dependent on new personnel and resources. A plan for sustainment should be part of any intervention requiring commitments of new staff or resources.
5. Few Veterans have only one chronic disease. Approaches to improving care should support the coordination and integration of care for Veterans, rather than building new interventions around single diseases.
6. HSR studies should assess common impacts based on the Quintuple Aim: improve outcomes, including quality and safety of health care, increase access, ensure equity, decrease cost, and support workforce.

Strategic Methodology	Benefit to Veterans	Key VA Priority Alignment
Implementation Science	Ensures "what we know is what we do" on a routine basis and that effective innovations get to Veterans more quickly	ORD Goal: Real-world Impact Congressional priority
Data Science	VA has extensive data that can be better leveraged to help improve Veteran care, outcomes, and experience in a way that ensures Veterans' privacy and equity	ORD Goal: Making VA Data work for Veterans Evidence Act (US PL 115-435)
Science of Engagement	Involving Veterans, providers, and other partners ensures treatments, programs, and policies work for Veterans, and that their lived experiences are considered	VA Strategic Plan: Support At-Risk, Marginalized Veteran Populations
Systems Science	Health care and health go beyond condition and disease labels; it takes a wider lens to understand the moving parts of the enterprise to improve them and to ensure safe and effective care	VHA Long-Range Goals (e.g., Connect Veterans to the Soonest and Best Care; Workforce; High reliability)
Policy Analysis/Evaluation	Many health problems have determinants outside the clinic walls, and need to improve alignment and effectiveness of programs, benefits, and policies to ensure optimal Veteran outcomes	VA Legislative Mandates, e.g., Evidence Act* MISSION Act* PACT Act* STRONG Veterans Act

*Evidence Act = Foundations for Evidence-based Policymaking Act; MISSION Act = Maintaining Internal Systems and Strengthening Integrated Outside Networks Act; PACT Act = Promise to Address Comprehensive Toxics Act

Aligning HSR strategic methodology areas with operational partner needs: HSR investigators rely on operational partners to help identify the problems to be solved so that they work on a shared agenda to

improve outcomes for Veterans and the providers who care for them. As different operational partners may focus on the priorities of their own program offices, settings, or populations, HSR and QUERI provide more specific guidance on priorities that are most salient to the larger ecosystem of local, regional, and national VA providers and policymakers using an annual priority-setting process that is detailed in the VA Strategic Plan (also see: Braganza, et al, 2022).

The QUERI process also supports VA's fulfillment of the Foundations for Evidence-based Policymaking Act, which requires U.S. Government agencies including VA to use evidence and evaluation to justify priorities and budgets. The process ascertains priority topic areas from the VA Strategic Plan, VA's Agency Priority Goals, VHA Long-Range Goals, legislative priorities, and the Network Director and Medical Center Director Performance Plans. QUERI then surveys VA operation partners including national program offices which focus on policies and clinical practice standards for specific conditions or populations (e.g., primary care, women's health, geriatric care, etc.), as well as programs and policies for the Veteran population in general (e.g., Veterans benefits, community care). Also surveyed are VA Integrated Service Network (VISN) and local Facility Directors who are responsible for managing care across a wide range of conditions and populations, the providers they employ, and the Veterans, families, and caregivers who they serve. Thus, VA HSR and QUERI priorities benefit from input from a broad array of end-users to ensure that the research is relevant to Veterans, providers, and other partners.

The current VA national priority goals based on this process include:
1. **Hire faster and more competitively:** improve workforce recruitment, onboarding, and retention of VA employees and trainees
2. **Connect Veterans to the soonest and best care:** reduce direct care wait times and community care appointment scheduling times by improving clinical availability and scheduling
3. **Promote a culture of safety, learning, and knowledge translation:** implement and evaluate programs focused on innovation, psychological safety, zero harm, and manager/leader training
4. **Prevent Veteran suicide:** prevent Veteran suicide using a public health approach (e.g., outside the clinic walls, partnerships with community service organizations)
5. **Serve Veterans with military and environmental exposures:** improve quality of care, including the identification and management of symptoms among Veterans with military and environmental exposures
6. **Reduce Veteran homelessness:** ensure more at-risk and underserved Veterans receive early interventions, partnerships and supportive services to prevent homelessness

HSR also uses several mechanisms to continually update and refine research priorities in order to inform short and longer-term research directions. For example, the Evidence Synthesis Program (ESP) addresses evidence and evidence gaps concerning specific clinical questions nominated by partners. Annual HSR State of the Art (SOTA) Conferences and field-based meetings examine the evidence in a broader priority area (for example, non-opioid therapies for chronic musculoskeletal pain) in association with operational partners. Research recommendations from ESP reports, SOTAs, and field-based meetings are published and incorporated into new research solicitations. HSR COnsortia of REsearch (COREs), e.g., access to care, suicide prevention, pain and opioid management, virtual care, and other entities such as the Elizabeth Dole Center of Excellence for Veteran and Caregiver Research, and the Women's Health Research Network are responsible for building Learning Health Systems for high-priority areas and providing the necessary infrastructure to conduct multisite collaborative research.

B. HSR Strategic Methodology Areas
The following HSR strategic methodology areas are aligned with the VA Office of Research and Development's overall strategic goals, notably to enhance the real-world impact of research for Veterans, put VA data to work for Veterans, and enhance diversity, equity, and inclusion.

1. Implementation Science

Point of Contact: Dr. Amanda Borsky (Amanda.borsky@va.gov)
Implementation science, or knowledge translation, is the scientific study of strategies used to promote the

uptake of effective interventions or treatments in clinical and community settings in order to improve Veteran health. The need for implementation science came from the realization that effective interventions are often developed within single sites and rarely get translated elsewhere due to organizational barriers and/or lack of provider time or resources, thus resulting in lost opportunities for spread and sustainability. Moreover, barriers to implementation are attributed to a lack of capacity in designing interventions to be implemented in routine practice (see Brownson et al, 2013; Proctor et al, 2011), lack of efficiency in use of existing staffing or resources and/or lack of deep understanding of the interactions across providers and between patients and providers.

A central area of implementation research is the development and testing of novel implementation (change) strategies to enhance the more rapid uptake, scalability, and sustainment of effective treatments, programs, or policies into real-world settings across a diverse health system. This also includes studies of strategies to de-implement low-value care. HSR is especially interested in implementation strategies that use highly specified, theory-based methods to improve uptake of effective practices, or in some cases, de-implement ineffective or low-value treatments. A variety of implementation strategies exist (Powell et al, 2015) that range from performance-focused strategies (i.e., "push") such as audit and feedback and performance incentives, to motivation-focused strategies (i.e., "pull") such as Evidence- based Quality Improvement, Facilitation and Community Engagement (Atkins et al, 2017). Yet few have been empirically tested that demonstrate real uptake of effective practices in routine care. Particular consideration will be given to hybrid designs involving development and testing of innovative implementation strategies that help close the gap between research and practice, particularly for underserved populations and health care settings (e.g., limited exposure to research studies or lower quality of care), to ultimately increase the substantial real-world impact of research.

Innovative use of pragmatic trial designs, hybrid effectiveness-implementation designs (Curran et al, 2012; Curran et al. 2022), stepped-wedge or similar designs, as well as adaptive or sequential multiple assignment randomized trial (SMART) designs is also highly encouraged. Studies involving the testing of implementation strategies should specify how fidelity to the effective practice is measured, as well as how the cost of implementation will be estimated. For more information including training opportunities in implementation science visit the QUERI Evidence, Policy, and Implementation Center (EPIC) and Center for Evaluation and Implementation Resources (CEIR).

2. Data Science

Point of Contact: Dr. Cathie Plouzek (*Cathie.Plouzek@va.gov*)
Data Science (Measurement/Informatics Science) in health involves the use of different scientific fields (e.g., statistics, scientific computing, anthropology, knowledge management) to garner insight into health and healthcare outcomes from unstructured and structured data to inform the use of computable biomedical knowledge in practice. Numerous data sets are incorporated into the VA Corporate Data Warehouse and the research repository on VA's Informatics and Computing Infrastructure (VINCI). Other important sources of data include Veterans Benefits Administration, Medicare claims, geographic information systems, census data, wearable devices, and social media. For more information see the VA Information Resource Center (VIREC).

HSR is interested in research that applies novel informatics methods to VA data or use novel data sources to improve outcomes related to the Quintuple Aim, including use of machine learning, data standardization, natural language processing and other types of artificial intelligence to diagnose health conditions and predict clinical and population health outcomes more accurately. HSR is also interested in strategies that maximize trustworthy use of artificial intelligence-generated data, the ethical use of data, and strategies for mitigating potential algorithmic bias in healthcare (e.g., London 2022; Ferryman, 2020). There is a special focus on using data sources beyond administrative and clinical (medical record) data, including social media, patient-reported outcomes, mobile health, e-health/web-based data, wearable devices, and data on genomics and population health. HSR also encourages studies that involve innovative methods to capture patient and provider experience (e.g., burnout) and patient-reported outcomes, as well as data on quality of care from non-VA settings and use of informatics or AI methods

as implementation strategies ([Trinkley et al, 2024](#)). Particular interest is also given to development and evaluation of new data science measures, methods, or tools that curate, validate, and optimize use of health and health care data, especially Veteran-centric outcomes for routine use in knowledge management in clinical practice (also see Engagement Science). Studies involving sites that have adopted the new Oracle Cerner electronic health record (EHR) must include comparison sites using legacy software (for more information visit the QUERI EHR-focused centers ([EMPIRIC](#), [SCHOLAR](#)).

Telehealth and Virtual Care: VA adopted virtual care technologies to deliver health care earlier and more widely than any other health system, yet evidence has lagged regarding how best to implement such technologies, their impacts on care and the associated experiences of Veterans and clinical team members. Applicants pursuing Virtual Care research topics are encouraged to reach out to and collaborate with the [Virtual Care Consortium of Research (CORE)](#).

3. Engagement Science

Point of Contact: Dr. Crystal Henderson (Crystal.Henderson@va.gov)
Engagement science (i.e., Science of Veteran, provider, and other operational partner engagement) involves the systematic incorporation of end-user input across multiple interested parties (e.g., Veterans, including their families and caregivers, frontline providers, clinical managers and other employees, leaders, policymakers, and community members) to inform all stages of the research from its inception to dissemination and sustainment. The VA strives to be a Veteran-centered health care system. In alignment with this mission, HSR is interested in advancing the science of [Veteran engagement](#) especially by examining strategies that optimize Veteran and community engagement in order to improve Veteran outcomes and Quintuple Aim goals. In particular, HSR studies seek to develop, test and scale novel strategies to optimize engagement of Veterans, caregivers/families, providers, communities, and other interested parties in the research process, including research priority-setting, incorporation of Veteran-centered outcome and lived experience data, and intervention development and implementation.

Such studies could examine the following:
- The most effective ways to engage Veterans and community members (including caregivers) in research, their health care, community linkages, etc.
- Best practices for levels of engagement in different phases of the research process
- The process of sustaining Veteran and other end-user engagement throughout studies
- How to ensure diversity, equity, and inclusion in Veteran and other end-user engagement and/or the importance of engaging Veterans with specific experiences of different diseases
- Developing metrics to measure how Veteran engagement impacts the research process.
- Comparative studies of different types of engagement or systematic reviews

Provider Engagement/Workforce: HSR is also interested in research that assesses the impacts of health care workforce programs and policies on Veteran outcomes including novel approaches to develop clinical, organizational, and leadership capacity among frontline staff and clinical managers. Provider, including frontline clinician and clinical management engagement is essential to ensure effective health care for Veterans. The VA established the Reduce Employee Burnout and Optimize Organizational Thriving ([REBOOT](#)) Task Force in 2021 to address burnout and promote professional fulfillment among employees. The roll-out of REBOOT initiatives provides opportunities to attain more rigorous evidence of the effect of these interventions on reducing burnout. HSR is committed to conduct of foundational research on provider engagement and to evaluate the initiatives launched under the VA-wide REBOOT effort. Investigators are encouraged to design research that leverages REBOOT initiatives and provides strong assessment of the REBOOT implementation streams. HSR also encourages interventional studies of workforce well-being and outcomes including organizational or system level interventions to improve workforce well-being (e.g., maximizing employee autonomy; improving working relationships; addressing resources and reducing workload; improving administration, leadership, and management support). Emphasis on the workplace experiences of underserved populations is strongly encouraged.

4. Systems Science

Points of Contact: Dr. Amanda Borsky (Amanda.Borsky@va.gov)

Health systems science, often referred to as health systems engineering (HSE), is the process of understanding how health care as a complex adaptive system can lead to generalizable improvements in the way health care and other services are delivered for Veterans. There has been a growing interest in applying approaches and tools from HSE and Complexity Science to solve many health care problems in the VA. HSE requires a variety of quantitative and qualitative tools for analyzing and interpreting system models. These tools come from fields such as psychology, computer science, operations research, management, economics, and mathematics.

Specifically, HSR is interested in the development, validation, and application of systems science or engineering models to enhance the effectiveness, quality, safety, and efficiency of health care for Veterans across different settings (e.g., primary, specialty, mental health, inpatient, emergency, long-term, and community-based care settings). This priority is aligned with ORD's priority to increase the substantial real-world impact of research and speaks to the need to improve the access, efficiency, and delivery of quality health services to Veterans, to optimize post-deployment care, community care, care transitions and other situations that cross health system/community boundaries.

This area of research is also aligned with the VA priority goal of achieving high-reliability health care. As underscored in the landmark National Academy of Medicine Future of Health Services Research report, more attention is needed on solving the complex health system and implementation issues facing large health care organizations, such as VA, in a timely manner. A High Reliability Organization (HRO) in VA is in response to the recent Government Accountability Office report highlighting the need for VA to deliver health care to Veterans optimally and consistently across different settings. HROs empower frontline providers to lead performance improvement, where health care leaders encourage a culture focused on operations through preoccupation with failure, reluctance to simplify, deference to expertise and commitment to resilience (Weick and Sutcliffe, 2015). HSR research informs the HRO initiative through foundational methods that address existing gaps in identifying and/or implementing standardized processes or approaches to increasing safety, reducing errors, and promoting continuous quality improvement. For further background on research related to HROs, see the most recent HSR Evidence Synthesis Program report.

Research on Nursing Workforce and Nursing Practice: HSR is also interested in research on nursing as outlined by the VA Nursing Research Agenda on the HSR State of the Art (SOTA) website. The US is faced with a national nursing shortage and understanding VA nursing workforce trends is essential to keeping VA hospitals, community living centers, and clinics open. Similarly, as nursing accounts for the largest VA workforce, improving the care that nurses deliver is vital to improving Veteran access, quality, outcomes, and experience. Thus, HSR is seeking research on how to optimize nursing practice and support the nursing workforce to improve Veteran care. To prioritize research on nursing, a "State of the Art" (SOTA) Conference was held and included researchers, clinicians, and health system leaders to create a VA nursing research agenda. Organizing partners included the Office of Nursing Services, the Office of Research and Development, Health Systems Research, and Rehabilitation Research and Development. The SOTA produced prioritized research questions in the following areas: Understanding VA nurse staffing trends and the influence Veteran, workforce, and health system outcome; Understanding and improving the environment that nurses work in; Optimizing nursing practice for pressure injury prevention, detection, and treatment; Evaluating the role and contribution of nurses in VA care coordination models; and Re-imagining the role of nurses in addressing the social determinants of health to improve health equity. The SOTA also made recommendations related to improving the nursing research infrastructure at VA related to data and the nursing science community.

5. Policy Analysis and Evaluation

Point of Contact: Dr. Kara Beck (Kara.Beck@va.gov)

A major area of focus in policy includes the implementation and assessment of the impacts of programs

and policies especially for underserved, at-risk, or marginalized Veteran populations (see VA Strategic Plan), including but not limited to populations experiencing homelessness, women Veterans, LGBTQ+ Veterans, aging Veterans, those living in rural settings, those with complex chronic physical or mental health conditions, and Veterans with disabilities. HSR studies on policy analysis and evaluation focus on services such as Veterans benefits, legislative mandates, national standards of care, Veterans justice programs, etc. that address gaps in Veteran health equity or social determinants of health. HSR also encourages research that is focused on major national legislative initiatives affecting Veteran care, notably the Foundations for Evidence-based Policymaking Act (Evidence Act), MISSION Act, PACT Act, and other legislative mandates. In addition, novel research on the impact of Veterans benefits (e.g., equity in receipt of benefits on health outcomes, new policies or programs to address social determinants of health) is also strongly encouraged. Examples of potential research topics informed by legislative mandates include but are not limited to:

- Improve Veteran housing and economic security outcomes, including preventing and ending homelessness
- Prevent opioid and related substance use disorders through programs that address the underlying environmental, social, and economic determinants (e.g., employment, education incentives, justice system and incarceration diversion programs) and/or complex, co-occurring conditions
- Enhance VA workforce capacity, effectiveness, and retention, including policies that enhance employee and trainee recruitment and experience
- Enhance caregiver support for Veterans, particularly those who are from marginalized or at-risk populations
- Improve Veterans' experience and outcomes with disability claims, including policies that enhance equity in Veterans' benefits related to health conditions screening and means testing
- Improve the outcomes of Veterans with military and environmental exposures through enhanced health and disability benefits and access to and quality of care for exposure symptoms

The Foundations for Evidence-based Policymaking Act of 2018 requires that all cabinet level agencies, including VA, ensure their budgets and policies are tied to, supported by, and justified by evidence. Since 2019, HSR's QUERI has superintended VA/VHA's response to the Evidence Act and, in concert with the VA Office of Enterprise Integration OEI, produced required deliverables to the U.S. Office of Management and Budget (e.g., learning agenda, evaluation plans, and capacity assessment, as detailed in the recent VA Strategic Plan), and provided consultation to VHA program offices on evaluation methods and budget justifications. Because the Evidence Act requires that all program budgets are eventually justified by evidence, VHA national program offices partnering with HSR may increasingly turn to investigators to conduct research activities to help inform their program investments. To this end, investigators are encouraged to work with their operations partners to conduct studies that will help inform program and policy decision-making. For more information on the Evidence Act, contact QUERI's Partnered Evidence-based Policy Resource Center (peprec@va.gov) or click here.

MISSION Act and Community Care

Point of Contact: Dr. Amanda Borsky (*Amanda.borsky@va.gov*)
The VA has implemented several programs (including those responsive to the Maintaining Systems and Strengthening Integrated Outside Networks (MISSION Act) and previously the Choice Act) to improve access by increasing opportunities for Veterans to obtain health care in the community. HSR is committed to supporting a comprehensive program of research related to implementing key components of the MISSION Act (novel research to enhance access to care for Veterans in VA as well as non-VA settings). Specific topics of interest include coordination of VA and non-VA care; facilitation of virtual care (e.g., telemedicine); optimizing and improving access to health care especially in rural areas, such as network adequacy, costs, quality and equity of care; value-based payment models; and improving access to and quality of care in medically underserved areas and populations. For more information related to HSR priorities regarding access and the MISSION Act, please refer to: About MISSION Act and Access and Community Care CORE.

C. Specific HSR Topic Areas

HSR studies also address specific topic areas that focus on a particular setting or population that have bene emphasized by operational partners. Special emphasis is placed on topic areas that also encompass VA national priorities, e.g., hire faster and more competitively (e.g., workforce), connecting Veteran to the soonest and best care (e.g., access, quality, equity), promote a culture of safety, learning, and knowledge translation (high reliability), prevent Veteran suicide, serve Veterans with military exposures, and reduce Veteran homelessness (including research on Veterans benefits).

HSR topic areas fall into the following broad categories:

1. Health Care System Organization and Delivery (Access, Emergency Medicine, Rural Health, Community Care, Women's Health)
2. Mental and Behavioral Health, including Suicide Prevention
3. Health Care and Clinical Management (Primary Care Practice and Complex Chronic Disease Management, Disabilities and Military Exposure, Opioid/Pain)
4. Long-Term Care, Aging and Support Services
5. Behavioral, Social and Cultural Determinants of Health (Health Equity, Whole Health, Homelessness)
6. Quality, Safety and Value

1. Health Care System Organization and Delivery

Access to Care and Rural Health

Point of Contact: Dr. Amanda Borsky (*Amanda.Borsky@va.gov*)
One of the top priorities of the Veterans Health Administration is to "connect Veterans to the soonest and best care." Historically, the VA has defined access as "an individual's ability to obtain the health care they need within an appropriate time frame" and has emphasized the importance of measuring how Veterans perceive their access to care rather than more standard measures (e.g., the number of available providers or wait-times for a patient's first appointment (Fortney et al, 2011)). Access in this model represents the "fit" between the clinical needs of patients and the ability of the health care system to meet those needs. This updated conceptualization of access also accounts for the impact of new technology on access, redefining how to measure access in the Digital Age and accounts for the digital connectivity that enables synchronous and asynchronous communications between patients and providers, and access to care in rural and community-based settings. To improve access, the following domains should be considered: Measurement (actual and perceived access); Equity (providing equitable and effective access to Veterans who are underrepresented or who experience disparities in VA); and Interventions (developing effective and scalable interventions that improve access that consider in-person, virtual, and community providers (Kaboli & Shimada 2023).

In addition to VA-direct care, many VA enrolled Veterans are eligible for VA-purchased community care or enrolled in other non-VA health care. There are a number of research gaps regarding how to "connect Veterans to the soonest and best care", e.g., quality of community care in comparison to VA-direct care; how telehealth can be used in all settings to address Veteran needs; understanding Veteran preferences and experiences in navigating choices between VA, community, and virtual care; development and validations of access to care measures that clinicians can use in needs assessments and care management. For more information, refer to the Access and Community Care CORE website and the Evidence-based Synthesis Program report on access.

Rural Veterans face unique health care challenges compared to their urban counterparts, including access barriers and workforce shortages. Rural Veterans also have attitudes and beliefs that support independence, self-reliance and trust in neighbors. In 2022, we convened a Rural Health State of the Art Conference (SOTA) that identified themes and research priorities. The meeting identified three priority

topics and four themes that cut across the priority topics including:

Priority Topics	Themes
• Implementation-effectiveness research, to inform public health management of crises and promote health equity in diverse rural communities:	• Cultural context for rural populations and how best to provide culturally relevant recommendations
• Rural Veterans' decisions/preferences about where they receive care and the quality of care they receive	• Issues of diversity, equity and inclusion as they apply to rural populations
• Innovations in infrastructure and human capital that can address disparities in rural workforce needs	• Innovations to improve access, like telehealth, but also developing other innovative ways to improve access that address the unique access challenges of rural Veterans
	• Mental health and overall wellbeing and how to meet the specific needs of rural Veterans in these fields

Emergency Medicine

Point of Contact: Dr. Amanda Borsky *(Amanda.Borsky@va.gov)*
To understand and prioritize research on emergency care for Veterans, HSR convened the State of the Art Conference on VA Emergency Medicine (SAVE) with researchers, operational leaders and stakeholders in attendance (more details are available here). Specific focus areas identified include:
- **Older Veterans:** Examining variation in care and the impact on patient outcomes, utilization, and costs; quality of Emergency Department (ED) care transitions and strategies to improve them; impact of geriatric care improvement initiatives; and use of geriatric assessment tools in the ED.
- **Veterans with Mental Health Needs:** Assess variation in staffing and delivery models and the impact on patient outcomes, utilization, and costs, such as embedding mental health staff in EDs; enhancing staff retention and recruitment; examining geographic differences in care; and improving mental health and substance use screening, along with evidence-based interventions in a Veteran and provider-centric manner.
- **Community Care:** Assessing patterns of use and costs in VA and community care (CC) as a result of recent policy and coverage changes (with an emphasis on modifiable factors); understanding quality, safety and Veteran experience differences between VA and CC settings; and a better understanding of follow-up needs among Veterans who have received CC emergency or urgent care and how well those needs are being met.

Telehealth was further identified as a priority for both older Veterans and those seeking access to emergency mental health care, including the quality, safety, and effectiveness of telehealth at the point of care for access to specialty care during acute emergencies.

Women's Health

Point of Contact: Dr. Amanda Borsky *(Amanda.Borsky@va.gov)*
Women Veterans continue to be among the fastest growing segment of new VA users, with unique health care needs and lingering gender-based disparities in care. VA women's health research prioritizes:
- Care for older women Veterans, including aging, menopause, and long-term care.
- Health care needs and interventions for post-deployment health that account for military experiences and exposures (e.g., how military experiences affect VA care utilization, tracking care after military exposure screening)
- Translational research and evidence across the lifespan and across services, including primary

care/prevention, reproductive health, mental health (e.g., suicide prevention, intimate partner violence, military sexual trauma, and PTSD)
- Access and community care, including coordination of community care women's health services, coordination of community-provided pregnancy and post-partum care, and rural health care
- Coordination of care for complex chronic conditions and multimorbidity (including cancer care)

More research is needed in these areas, as well as strategies to enhance trauma-informed care, end harassment and intimate partner violence, and explore the effectiveness of gender-tailored interventions where needed. For information related to ongoing initiatives to accelerate women Veterans' health care research, please refer to:
- New [Executive Order on Advancing Women's Health Research and Innovation | The White House](#)
- [VA Women's Health Research Network](#)
- [Women's Operational Military Exposure Network Center of Excellence (WOMEN CoE) - War Related Illness and Injury Study Center (va.gov)](#)
- [EMPOWER Quality Enhancement Research Initiative (QUERI)](#)
- [VA Office of Women's Health](#)
- [National Center for PTSD](#)
- [Office of Mental Health and Suicide Prevention: Mental Health Women Veterans](#)
- [NIH Office of Research on Women's Health](#)

2. Mental and Behavioral Health

ORD has separate research portfolios devoted to research on **Brain, Behavioral, and Mental Health (including Actively Managed Portfolios for TBI and Suicide Prevention)**. Investigators are encouraged to review the request for applications from these portfolios for HSR- relevant topic areas reflected in these mechanisms. Specific areas relevant to HSR are described below.

Suicide Prevention

Point of Contact: Dr. Robert O'Brien *(Robert.O'Brien2@va.gov)*
HSR encourages research that focus on informing, developing, improving, and disseminating evidence-based practices that will prevent suicide among Veterans. These may include population-based, individual-based, and system-level studies that improve identification and engagement of at-risk Veterans and examine and improve the delivery of suicide prevention interventions and strategies, all while drawing from the perspectives of patients, caregivers, providers, and managers, as well as from the relevant datasets available.

Currently, HSR/ORD is partnering with the [Office of Mental Health and Suicide Prevention](#) (OMHSP) on a number of research activities, including some related to the Commander John Scott Hannon Veterans Mental Health Care Improvement Act to advance the efforts by VA, other Federal partners and local communities in preventing suicide and promoting mental health and well-being among Veterans. In addition, HSR is collaborating with various external partners such as DoD, NIH, and other external funding agencies in these areas.

For additional information related to suicide prevention, refer to the [SPRINT](#) (Suicide Prevention Research Impact NeTwork) CORE (Consortium of Research), as well as the VA's Evidence Synthesis Program (ESP), which in partnership with CIVIC (Center for Improving Veteran Involvement in Care), has prepared a number of reviews related to suicide prevention research and a [Compendium of Suicide Prevention Topics](#).

Mental Health (including PTSD)

Point of Contact: Dr. Robert O'Brien *(Robert.O'Brien2@va.gov)*
Given the high prevalence of mental health issues/PTSD among Veterans, mental health is a high priority research area for HSR. Mental health research supported by HSR primarily focuses on PTSD,

depression, suicide, and serious mental illness, as well as substance/alcohol use disorders and smoking cessation. HSR prioritizes innovative and efficient models of delivery, measurement-based care and primary care-mental health integration; addresses co-occurring disorders (both multiple mental health conditions, including substance use disorder and mental health conditions co-occurring with chronic health conditions); enhances quality of mental health and substance use services across medical centers; and promotes use of evidence based practices/medications. HSR is less interested in studies that focus on single sites or narrowly target specific mental health conditions (e.g., CBT for depression). HSR also supports research specifically addressing the knowledge and programmatic needs of OMHSP.

PTSD is one of the most common psychiatric sequelae of war. Among military Veterans returning from deployments in Iraq and Afghanistan, rates of PTSD are much higher (20%) than that found in the general population. Currently, about 400,000 Veterans enrolled in VA are diagnosed with PTSD. Those who suffer from PTSD often have diminished functioning and a poorer quality of life as evidenced by elevated rates of suicide, hospital admissions, poverty, and unemployment. Although there are treatments available that have demonstrated effectiveness among individuals with diagnosed PTSD, many people who have PTSD may not be diagnosed and many who are diagnosed do not pursue mental health treatment. Of those who do seek treatment, prolonged delays are common. Examples of interest areas for HSR related to PTSD research include:
- Interventions to increase the engagement and retention of Veterans in evidence-based therapies.
- Studies of optimal care for PTSD outside of mental health settings, especially in primary care as well as care in underserved areas
- Use of virtual care or e-health technologies to enhance access to effective psychotherapies.
- Optimal combinations of psychosocial and pharmacologic treatments for PTSD, including treatment response across different Veteran populations, the use of sequential multiple assignment randomized trials (SMART) or similar adaptive designs
- Incorporation of patient preferences and caregiver support into treatment for Veterans living with PTSD

3. Health Care and Clinical Management

Primary Care Practice and Complex Chronic Disease Management

***Point of Contact: Dr. Cathie Plouzek** (Cathie.Plouzek@va.gov)*

ORD is forming the **Medical Health and Aging Broad Portfolio** which is devoted to research in the topic of medical conditions, as well as a new portfolio devoted to Pandemic Responses and Infectious Diseases (e.g., COVID) that will cover acute and chronic conditions. Investigators are encouraged to review the request for applications from these portfolios for HSR-relevant priorities reflected in these mechanisms. Specific areas relevant to HSR are described below.

HSR's research priorities for primary care and complex chronic conditions include the full continuum of care, from health promotion, disease prevention, diagnostics, therapeutic and rehabilitative care to recovery and palliative care. There is a special focus on using innovative approaches and technologies through interdisciplinary collaborations both within and outside VHA, Whole Health, and Patient Aligned Care Team models that provide patient-driven, proactive, personalized, team-based care to improve Veteran satisfaction and health care outcomes while improving costs. This approach focuses on treatment, self-empowerment, self-healing, self-care and improving social determinants of health. VA aims to improve Veteran health outcomes by shifting from a focus on disease management to one focused on the whole person and partnering with Veterans throughout their lives. VA stresses preventive interventions for healthy Veterans that eliminate or significantly reduce diabetes, obesity, chronic pain, addiction, chronic kidney disease and other similar conditions, incorporating complementary and integrative health care practices where appropriate (see VA Strategic Plan). In addition, HSR focuses on high quality health care by improving provider and staff morale (e.g., low/high burnout, job satisfaction or turnover rates) (Rubenstein et al, 2019).

Disabilities, Military Exposure (including Spinal Cord Injury and TBI)
Point of Contact: Dr. Crystal Henderson (Crystal.Henderson1@va.gov)

ORD has separate research portfolios devoted to research on military exposures, available through the **Military Exposures Research Program (MERP),** as well as Veterans with traumatic brain injury and functional disability, through the **Functional Rehabilitation Broad Portfolio.** MERP seeks to advance military exposure assessments and to understand the effects of military exposures on Veterans' health outcomes to inform care and policy. Investigators are encouraged to review the request for applications from these portfolios for HSR- relevant priorities reflected in these mechanisms. Specific areas relevant to HSR are described below.

In addition, the PACT Act (Promise to Address Comprehensive Toxics) is a new law that expands VA health care and benefits for Veterans exposed to burn pits and other toxic substances. HSR is interested in prospective data collection (qualitative and quantitative) on the quality of care for Veterans with military exposures, as well as factors that might influence access to and quality of care including Veterans benefits programs; Veteran trust in the system or decision-making; barriers Veteran face when seeking new benefits; the impact on providers; changes in utilization of services and outcomes (e.g., pulmonary function tests); and Veteran's perceptions on the implications of environmental exposures, the PACT Act, and their health care; and other related issues.

The follow is a summary of HSR areas most pertinent to VA national priorities focused on serving Veterans with military and environmental exposures:
- Research to improve quality of care for Veterans with military exposures, including the identification and management of symptoms among Veterans with military and environmental exposures (also see PACT Act and VA 2024 Annual Evaluation Plan)
- Impact of collaborations across the different federal agencies on the implementation of programs and policies related to military environmental exposures experienced by Veterans.
- Optimizing strategies to implement effective care models to provide comprehensive care for Veterans exposed to military environmental exposures
- Health system, facility -level and broad health policy considerations of services and treatments for Veterans with TBI and disability and co-occurring conditions.
- Veterans' caregiver support, community services, non-VA care provided in-home or by long-term Social Support providers, and other modalities of care beyond the clinic walls for Veterans with TBI and other functional disabilities

Traumatic brain injury (TBI) accounts for a significant portion of combat causalities from the ongoing conflicts in Afghanistan and Iraq. Concussive or mild TBI (mTBI), which is the most common form of combat m-related injury, can occur in those not directly hit by a blast, without obvious external injuries and without loss of consciousness. Common outcomes of mTBI include memory problems, lack of concentration and increased anxiety and irritability.

Service men and women close to blasts may also experience other severe injuries. Moderate to severe TBI can cause persistent trouble with executive function, sensory difficulties, and emotional disturbances, resulting in permanent difficulties with memory, reasoning, emotion, and expression, all of which make it difficult to hold steady employment or regain pre-injury quality of life.

HSR is also interested in studies related to the specific impact of the Gulf War on the health and care of Veterans. By mid-2013, Gulf War Veterans accounted for more than 2 million outpatient visits and more than 20,000 inpatient admissions. Although an increase in multi-symptom illnesses has been documented for Gulf War Veterans, relatively little is known what kind of care Gulf War Veterans have been receiving (from within and outside of VA) for multi-symptom illnesses and other unusual health conditions. VA is especially interested in studies that compare care patterns in Gulf War Veterans to other Veterans with similar conditions or needs, and the impact of such care on Veteran outcomes and care experience.

Chronic Pain Management and Opioid Use Disorders
Point of Contact: Dr. Cathie Plouzek (Cathie.Plouzek@va.gov)

ORD has established an **Actively Managed Portfolio (AMP) on Pain/Opioids**. Investigators are strongly encouraged to review the PAIN/Opioid AMP purview and Request for Applications (Pre-application-POpAMP.pdf) for HSR-relevant priorities in these topic areas.

The follow is a summary of research priority areas most pertinent to HSR's scientific priorities that are also related to chronic pain management and opioid misuse with the goal of supporting Veterans with chronic pain, opioid use disorder (OUD) and/or co-occurring pain and OUD. Veterans with combat-related injuries often have unique mental and physical comorbidities that exacerbate their risk for developing chronic pain and/or OUD. HSR aims to fund studies that focus on the following areas:

- Implementation of novel, evidence-based practices (EBPs) and approaches that enhance pain treatment services and focus on long-term recovery from pain, especially for underserved groups, with a focus on nonpharmacologic interventions that are feasible and sustainable to deliver in VA and community-based settings as well as strategies that focus on patient, provider, and system-level changes to enhance uptake and sustainment of EBPs.
- Effectiveness and implementation studies that assess the impact of interdisciplinary treatments or models of care that address cross-diagnostic conditions, including chronic conditions that directly impact pain, opioid use, or related substance use disorder management (e.g., team-based primary care, integrated behavioral health, peer-support and coaching for neuroscience and medical care, and coordinated VA and community-based services), especially treatment models that address Veteran-centered outcomes.
- Research on programs and policies that address environmental, social, and economic determinants that influence optimal pain management and/or prevention of opioid and related substance use disorders, including those related to enhancing access to telehealth/virtual care services, enhancing the healthcare workforce, and Veterans benefits that address social determinants such as housing and economic security and employment/education incentives, justice system and incarceration diversion programs, and provider workforce development and retention programs that enhance Veteran access to pain and opioid/substance use disorder services, e.g., provider recruitment, professional development, and accreditation incentives.

For general information regarding opioid misuse and their impact on chronic pain management, refer to the Pain/Opioid Consortium of Research (CORE) website.

4. Long-Term Care, Aging and Support Services Priorities

Long Term Care and Aging

Point of Contact: Dr. Robert O'Brien (Robert.O'Brien2@va.gov)
ORD is forming the **Medical Health and Aging Broad Portfolio and Alzheimer's and Related Dementias Portfolio** which is devoted to research in the topic of aging. Investigators are encouraged to review the request for applications from this portfolio for HSR-relevant priorities reflected in these mechanisms. Specific areas relevant to HSR are described below.

The Veteran population is aging and it is essential to ensure that VA health services are providing the best possible clinical outcomes and quality of life for older Veterans living in VA community living centers (CLCs), contract facilities and at home. Most Veterans prefer to be cared for in their homes, yet VA spends a disproportionate share of its budget on institutional care vs. long-term support services. The aging Veteran population, as well as the rising costs of nursing home care, has also increased the demand for home-based care (Ramchand et al, 2014). Innovative research is needed to examine care for older Veterans in non-institutional settings such as Medical Foster Homes, Residential Care Programs, and other community facilities (e.g., adult homes, assisted living facilities), and whether enhanced care

can allow more Veterans to stay at home as they age.

There is also a need for research on how aging affects the care required and the ability to self-care. With Veterans requesting more service delivery in their own homes, there is urgent demand for research on a wide variety of community delivered care services and topics. Specific issues such as technology use, variance of care across VHA settings, coordinating clinical consultation across multiple sites, specialty care, durable medical equipment, prosthetic care, oxygen services and customizing Veteran homes to facilitate activities of daily living, are all driving the changing focus of VA care. Moreover, significant projected increases in the numbers of Veterans with dementia, other mental illnesses and additional multiple service-connected conditions are raising the complexities and challenges for innovative research-based solutions. Hospice and palliative care remain an important area of interest.

Caregiver, long-term care, and non-institutional care for Veterans is also emphasized given the expansion of eligibility for comprehensive family assistance to caregivers under the MISSION Act. Investigators are strongly encouraged to contact The Elizabeth Dole Center of Excellence for Veteran and Caregiver Research (va.gov) to also obtain the latest national priorities related to this research area.

5. Behavioral, Social and Cultural Determinants of Health Priorities

Health Equity and Social Determinants of Health

Point of Contact: Dr. Crystal Henderson (*Crystal.Henderson1@va.gov*)
Recent estimates suggest that clinical care accounts for less than 20% of modifiable health outcomes and that other factors, including social determinants of health, are more significant drivers of morbidity and mortality. Social determinants of health included environmental factors such as where people are born, live, learn, work, play, worship and age that affect a wide range of outcomes including overall health, functioning, and quality of life. These factors include access to safe housing, nutritious food, reliable transportation, clean water and functioning utilities and neighborhood quality, including public safety, concentrated poverty and built environment; employment, job security and occupational safety; educational attainment and health literacy; history of incarceration and access to legal assistance; social connectedness; and exposure to chronic stress, including racism and other forms of discrimination.

Equitable access to high-quality health care is a VA priority and a priority outcome per Quintuple Aim goals. Within the VA health care system, racial disparities for most process-of-care measures are minimal, but racial disparities in health outcomes persist. Despite the importance of social determinants of health in shaping health outcomes, health care utilization and health disparities, the evidence base of best practices in identifying unmet social needs and integrating social care and health care is lacking.

HSR strongly encourages research that will identify, develop, evaluate and/or implement evidence-based practices to mitigate unmet social needs of Veterans, examine structural factors within VA health care that may contribute to disparities and reduce racial disparities in health outcomes and quality of care among Veterans, as well as programs and policies to expand diversity of the VA workforce.

Ending Veteran Homelessness and Housing Insecurity

Point of Contact: Dr. Robert O'Brien (Robert.O'Brien2@va.gov)
The VA Strategic Plan lists ending homelessness as a national priority. The following research priorities have been identified for health services research based on the updated VA National Strategic Plan Learning Agenda Supplement on Homelessness:

Studies are needed that allow the VA to better understand and intervene on system, environmental, and social factors affecting Veteran homelessness as well as housing and economic insecurity, including novel programs and policies that involve Veterans benefits.

Research is needed in the area of Veteran-centered risk assessment, including assessment of Veterans' and military service members' potential to predict their own risk of housing insecurity. These studies will inform primary prevention interventions, or methods or strategies that facilitate identification of Veteran-centered outcomes for use in research and evaluation of programs to end Veteran homelessness.

Rigorous studies (e.g., randomized program evaluations) are needed to assess impacts of existing VA programs and policies to end Veteran homelessness and/or housing insecurity, including programs such as peer support services, microlending/financial services (e.g., cash assistance), trauma-informed services supporting housing, as well as low barrier/low demand shelter services, and street medicine.

Work is required to design and assess strategies that improve implementation and sustainment of effective programs and policies to end homelessness and housing insecurity among Veterans. This includes studies that seek to understand and mitigate barriers to program uptake (e.g., labor shortages, geographic proximity of affordable housing to VA medical centers) as well as program fidelity.

The development and implementation of interventions to improve workforce capacity and well-being among those serving Veterans experiencing homelessness or housing insecurity, including burnout interventions for homeless service providers as well as task-shifting and other policies that enhance workforce capacity.

Research is also needed on at-risk or marginalized Veteran populations that are experiencing or at risk for homelessness or housing/economic insecurity, including women Veterans, aging Veterans, LGBTQ+ Veterans, racial/ethnic minorities, persons with mental disorders, persons with disabilities or other populations, especially those traditionally underrepresented in research.

Whole Health

Point of Contact: Dr. Crystal Henderson (Crystal.Henderson1@va.gov)
For the past six years, VA has been promoting patient-centered care through the implementation of a [Whole Health approach](#). Whole Health is defined as an approach to health care that empowers and equips people to take charge of their health and well-being and live their life to the fullest. The goals of the Whole Health approach go beyond patient-centered care; they focus on understanding the Veteran's life meaning, aspiration and purpose (i.e., what matters most to the Veteran) as the foundation for health care delivery. Whole Health integrates allopathic and complementary and integrative health (CIH) care where patients' goals and priorities are incorporated into health care decisions, with peer-led support, personalized health planning, Whole Health coaches and well-being classes.

Examples of areas for future research include: the impact of Whole Health initiatives on Veterans with mental illness, chronic illness, women Veterans, and vulnerable Veterans; Whole Health implementation in mental health and long-term care; and how Whole Health can assist in addressing social determinants of health. Research is also needed on effective strategies for implementing Whole Health components of care in different VA health care settings and to examine the effect of Whole Health services on employee health and well-being.

6. Quality, Safety and Value

Quality and Safety of Health Care

Point of Contact: Dr. Cathie Plouzek (Cathie.Plouzek@va.gov)
Quality, safety and value are outcomes that are common to most other research priority areas in health services research. HSR also supports work that examines cross cutting questions in quality, safety and value that transcend individual conditions or populations. These include research studies on how to measure quality, organizational factors that influence quality and safety (including work on High Reliability Organizations), and interventions to improve patient safety and reduce errors, increase value of healthcare, and reduce ineffective or low-value care.

HSR also encourages research involving systems redesign in health care that optimizes the delivery of primary care, emergency care, acute care and transitions post-discharge, to improve the quality, safety, and value of care delivery to Veterans. The focus on quality and safety is particularly critical in developing a seamless and integrated system of care with community providers in light of the MISSION Act, and other legislative mandates related to access to care.

The Evidence-based Practice Workgroup (EBPWG) within VHA's Quality and Patient Safety is a joint effort between the VA and DoD that creates and disseminates Clinical Practice Guidelines (CPGs) specific to Veteran and service member care. Subject Matter Experts provide recommended clinical measures associated with CPGs. Although the joint guideline program has been in place for nearly two decades, there are limited data to document the impact of the guidelines on practice or clinical outcomes. There is a need for better understanding of CPG diffusion and the best way to improve the impact of the guidelines on VA practice and Veteran health outcomes. HSR encourages research that aims to assess:
- Awareness, reach and uptake of CPGs, including potential disparities in scale up and spread
- Implementation strategies to increase CPG impact
- Clinical decision support or artificial intelligence tools that enable automated identification of eligible populations or increased engagement with CPGs
- Studies may be observational in nature, leveraging data to understand changes in practice when new CPGs are implemented or prospective wherein investigators are aiming to assess specific interventions to optimize CPG diffusion.

The National Center for Patient Safety has identified the following areas of focus based on review of the VHA Long Range Planning Framework (FY2022-2025):
- Community Care and Patient Safety (MISSION ACT) e.g., handoffs in care, delays in care/treatment, missed diagnoses
- Falls and fall injury prevention; prevention of hospital acquired infections; medication errors and medication deprescribing
- Suicide prevention
- Reducing preventable harm to Veterans using the HRO model.

Health Care Value

Point of Contact: Dr. Amanda Borsky (Amanda.Borsky@va.gov)

The National Academy of Medicine has developed a widely accepted approach that describes high-value health care as: safe, timely, effective, efficient, equitable and patient-centered (STEEEP). See Value in Health Care and IOM: Value and Science-Driven Health Care for more information. While there is substantial research identifying healthcare practices that do not provide high value – due to combinations of high costs and minimal or no benefit – there is much less research defining strategies to reduce the use of low value services or increase the overall value of care. Furthermore, strategies that work to reduce costs in fee-for-service systems may not work in healthcare systems such as VA with a fixed budget and high fixed costs. Proposals need to have input from decisionmakers who would act on information and endorsement of how information could be actionable by demonstrating engagement by the person/role/office that would act on it (e.g., VISN Director, Office of Integrated Veteran Care, etc.)

HSR is especially interested in the following research areas:
- Validating and implementing measures of health and health care value from multiple perspectives (patient, provider, clinical team or organization, VA health system, etc.)
- Health care interventions or policies that improve value of Veteran health care and social services
- Comparative studies of health care interventions on their relative value from multi-stakeholder perspectives
- Strategies for de-implementing low-value interventions or other ineffective health care practices.
- Strategies to manage the costs of high-cost interventions including new pharmaceuticals and technologies.

- Strategies that encourage the uptake of high-value care, including preventive care

Investigators are strongly encouraged to contact the [Health Economics Resource Center (HERC) (va.gov)](va.gov) and [Partnered Evidence-Based Policy Resource Center Home (va.gov)](va.gov) for more information on measuring health care cost and value.

An emerging Program Office partner in the Value space is [the Center for Care and Payment Innovation](#) (CCPI), which was established under the MISSION Act (Sect. 152) in 2018 to identify and test new financial and service delivery models. The MISSION Act further authorizes the VA, subject to Congressional approval via joint resolution, to waive statutes and regulations that govern Veterans' benefits related to hospital, nursing home, domiciliary, and medical care in order to test care and payment innovations. CCPI promotes value at VA by piloting innovations in payment, care, and business operations to improve Veteran care and well-being, leveraging its unique waiver authority as needed. CCPI is currently developing strategies to:
- Align VA care to quality, outcomes, and cost
- Model current resources to unlock capabilities and meet unmet patient demand
- Support field training towards Veteran-centric care: organize around patient's care journeys
- Pilot test strategies to optimize outcomes per unit cost