

UMass Chan Medical School

eScholarship@UMassChan

Population and Quantitative Health Sciences
Publications

Population and Quantitative Health Sciences

2021-06-01

Partnership Forum: The Role of Research in the Transformation of Veterans Affairs Community Care

Michelle A. Mengeling
University of Iowa

Et al.

Let us know how access to this document benefits you.

Follow this and additional works at: https://escholarship.umassmed.edu/qhs_pp



Part of the [Community-Based Research Commons](#), [Health Services Administration Commons](#), and the [Military and Veterans Studies Commons](#)

Repository Citation

Mengeling MA, Mattocks KM, Hynes DM, Vanneman ME, Matthews KL, Rosen AK. (2021). Partnership Forum: The Role of Research in the Transformation of Veterans Affairs Community Care. Population and Quantitative Health Sciences Publications. <https://doi.org/10.1097/MLR.0000000000001488>. Retrieved from https://escholarship.umassmed.edu/qhs_pp/1446

Creative Commons License



This work is licensed under a [Creative Commons Attribution-NonCommercial-No Derivative Works 4.0 License](#). This material is brought to you by eScholarship@UMassChan. It has been accepted for inclusion in Population and Quantitative Health Sciences Publications by an authorized administrator of eScholarship@UMassChan. For more information, please contact Lisa.Palmer@umassmed.edu.

Partnership Forum

The Role of Research in the Transformation of Veterans Affairs Community Care

Michelle A. Mengeling, PhD, MS,† Kristin M. Mattocks, PhD,‡§
Denise M. Hynes, PhD, MPH, RN,||¶ Megan E. Vanneman, PhD, MPH,#**††
Kameron L. Matthews, MD, JD,‡‡ and Amy K. Rosen, PhD§§|||*

In response to concerns about Veterans' access to Veterans Affairs (VA) health care services, Congress passed the Veterans Access, Choice and Accountability Act of 2014 (Choice), which broadened Veterans' eligibility to receive health care delivered by non-VA community providers paid for by VA (ie, Community Care).¹ Specifically, the Veterans Choice Program (VCP) allowed Veterans waiting longer than 30 days for specific services in VA, who lived > 40 miles from a VA clinic, or who experienced specific hardships in accessing VA care, the option of receiving Community Care. To help implement VCP successfully, the VA established the Office of Community Care (OCC) in fiscal year (FY) 2015 to lead the coordination of Community Care expansion. This included reorganizing local departments at each VA facility to ensure that VA/Community Care referrals across systems occurred seamlessly.

With the passage of Choice, one of VA's top priorities—to become a high-performing integrated network—was changed to reflect the inclusion of both VA and Community providers. Similarly, the VA's Health Services Research and Development Service (HSR&D) portfolio began to incorporate the new priorities arising from the expansion of Community Care.² The initial call for Community Care research funding set the stage for collaborations between operations and research. Although the implementation of the VCP was underway, new contracts for Community Care were still in process, and therefore researchers were expected to conduct their activities in active partnership with OCC. The purpose of these collaborations was to achieve “a scientifically rigorous product that is also relevant, feasible, and sustainable in real-world medical practice.”³ By partnering with OCC, our research teams'

From the *Center for Access & Delivery Research and Evaluation (CADRE) and VA Office of Rural Health (ORH), Veterans Rural Health Resource Center-Iowa City (VRHRC-IC), Iowa City VA Health Care System; †Department of Internal Medicine, University of Iowa Carver College of Medicine, Iowa City, IA; ‡VA Central Western Massachusetts Healthcare System, Leeds; §Department of Population and Quantitative Health Sciences, University of Massachusetts Medical School, Worcester, MA; ||Center to Improve Veterans Involvement in Care (CIVIC) and Evidence Synthesis Program, Portland VA Healthcare System, Portland; ¶Health Management and Policy, College of Public Health and Human Sciences, and Health Data and Informatics, Center for Genome Research and Biocomputing, Oregon State University, Corvallis, OR; #Informatics, Decision-Enhancement and Analytic Sciences Center, VA Salt Lake City Health Care System; **Department of Internal Medicine, Division of Epidemiology; ††Department of Population Health Sciences, Division of Health System Innovation and Research, University of Utah School of Medicine, Salt Lake City, UT; ‡‡Office of Community Care, Veterans Health Administration, US Department of Veterans Affairs, Washington, DC; §§Center for Healthcare Organization and Implementation Research (CHOIR), VA Boston Healthcare System; and ||||Department of Surgery, Boston University School of Medicine, Boston, MA.

The Partnership Forum “VA Community Care: Ongoing Evaluation Efforts, Preliminary Analyses, Data Systems, and Emerging Issues in the Implementation of The MISSION Act,” was held in Washington, DC, on October 31, 2019, at the VA's 2019 Health Services Research & Development/Quality Enhancement Research Initiative (HSR&D/QUERI) conference “Innovation to Impact: Research to Advance VA's Learning Healthcare Community.”

Supported by the Department of Veterans Affairs, Veterans Health Administration, Health Services Research and Development (HSR&D) SDR 18-318 (A.K.R., M.E.V.), SDR 18-319 (K.M.M., M.A.M.), SDR 18-321 (D.M.H.), SDR 20-390 (K.M.M., A.K.R., M.E.V., M.A.M., D.M.H.), CDA 15-259 (M.E.V.), and RCS 97-401 (A.K.R.). All authors are employed by the Department of Veterans Affairs.

Correspondence to: Michelle A. Mengeling, PhD, MS, Center for Access & Delivery Research and Evaluation (CADRE) and VA Office of Rural Health (ORH), Veterans Rural Health Resource Center-Iowa City (VRHRC-IC), Iowa City VA Health Care System, Bldg. 42, Suite 260 (152), 601 Highway 6 West, Iowa City, IA 52246. E-mails: michelle.mengeling@va.gov; michelle-mengeling@uiowa.edu.

Supplemental Digital Content is available for this article. Direct URL citations appear in the printed text and are provided in the HTML and PDF versions of this article on the journal's website, www.lww-medicalcare.com.

Copyright © 2021 The Author(s). Published by Wolters Kluwer Health, Inc. This is an open access article distributed under the terms of the Creative Commons Attribution-Non Commercial-No Derivatives License 4.0 (CCBY-NC-ND), where it is permissible to download and share the work provided it is properly cited. The work cannot be changed in any way or used commercially without permission from the journal.

ISSN: 0025-7079/21/5906-S232

interests and methodologic expertise were and continue to be informed by OCC's knowledge of changing health care delivery practices and policies.^{4,5} Through communicating early and frequently with OCC, having a shared understanding of our mutual goal to increase Veteran access to high-quality timely health care, and leveraging our respective scientific and organizational strengths,³ we were well-positioned to ensure that our research efforts would have maximal impact and relevance for real-world clinical practice in the VA Health Care System.

In 2017, HSR&D awarded planning grants to our 3 research teams to develop methods to evaluate VCP's impact on Veterans' health care quality, costs, and access and to investigate Community Care Network (CCN) adequacy. These research efforts were undertaken with the expectation that they would be conducted in active partnership and collaboration with OCC. Relationships between our HSR&D research teams and OCC began informally, with each team reaching out separately to OCC based on their specific research needs. Simultaneously, the research teams began working collaboratively with one another and with the VA's Partnered Evidence-Based Policy Resource Center (PEPRc) to share what we each learned and prevent duplication of efforts across projects. These early partnerships resulted in our HSR&D research teams and OCC leadership coming together on common areas of interest, such as at the Network Adequacy Expert Panel meeting in 2017⁶ and the Evaluation Data Strategy meeting in 2018 where we exchanged knowledge about Community Care processes and data resources to support evaluation.

By 2018, each of our 3 research teams had a strong partnership with OCC and growing numbers of HSR&D researchers who were developing proposals focused on Community Care were also interested in establishing partnerships with OCC. As Veterans' utilization of Community Care continued to increase, HSR&D awarded additional grants, including 3 additional years of research funding to each team following successful completion of the planning grants. These new grants focused on the accuracy and missingness of Community Care data and its impact on care coordination; the impact of the implementation of the Choice Act on Veterans' health care quality, costs, and access; and the adequacy of the CCNs. About this same time, the VA Maintaining Internal Systems and Strengthening Integrated Outside Networks (MISSION) Act of 2018⁷ was passed, which further expanded eligibility for Veterans to Community Care and created a more permanent and consolidated Community Care Program, the Veterans Community Care Program (VCCP). This Act not only increased Veterans' options to seek care in the community but provided a stronger "raison d'être" for the partnership between research and OCC.

By 2019, with increasing numbers of grants awarded to HSR&D researchers, OCC was frequently asked to provide needed information on Community Care data, policy, and implementation updates. Each of our 3 research teams was also contacted more often by other researchers interested in learning about our experiences in working with Community Care data. Recognizing the need to disseminate information more widely and systematically throughout the VA research community, we proposed a Partnership Forum with OCC entitled "VA Community Care: Ongoing Evaluation Efforts, Preliminary Analyses, Data Systems, and Emerging Issues in

the Implementation of The MISSION Act," for VA's 2019 Health Services Research & Development/Quality Enhancement Research Initiative (HSR&D/QUERI) conference.

THE PARTNERSHIP FORUM

The Partnership Forum was designed to bring together individuals interested in Community Care to share ideas, gain knowledge, and discuss the potential synergy between OCC's and VA researchers' priorities and interests. Dr Kameron Matthews, Deputy Under Secretary for Health for Community Care, gave researchers the opportunity to learn more about current OCC priorities, the ways in which researchers could contribute to these priorities, and the newly implemented MISSION Act. After Dr Matthews' presentation, each of our 3 research teams provided a brief overview of our research efforts, sharing what we had learned about VCP and our work in progress. The next sections of this paper provide the highlights of these Forum presentations.

Office of Community Care Priorities

An aim of the Partnership Forum was for OCC to identify priority areas where research efforts would be most impactful. According to Dr Matthews, the overarching priority is to ensure Veterans have access to a Community Care program that is easy to use, provides greater choice and high-quality care, and allows for robust care coordination. This requires a focus on health care delivery—establishing and managing contracting, facilitating clinical integration, overseeing provider relations and services, and claims reimbursement. Although these activities are not typically within the purview of researchers, the research community has some overlapping interests with OCC's. For example, how the implementation of VCCP affects the delivery of health care to Veterans is fundamental to the efforts of both researchers and OCC. Greater attention to the realities of the health care delivery system means that research findings may be more rapidly implemented into real-world clinical practices as they are likely to be clinically driven and evidence based. Yet, these same realities may present barriers to implementation that will need to be overcome.

Care Coordination

OCC spoke of the lack of existing research to guide the implementation of evidence-based care coordination models for multisystem use and the need to better understand Veterans' care coordination needs. Although OCC monitors the extent to which Veterans receive care from both VA and Community Care providers and seeks to improve processes that facilitate better communication and convenient and secure sharing of medical records,⁸ it needs researchers' assistance with the following: (1) methods development; (2) evaluation of care coordination improvement efforts; (3) tailoring care models to specific health conditions⁹ and patient populations¹⁰; and (4) aligning resources with high-risk patients, regardless of where patients receive care. To ensure satisfactory patient outcomes,¹¹ OCC is committed to care coordination that encompasses care delivered through both VA facilities and VA community providers, as well as through public (eg, Medicare, Medicaid) and private providers.

Quality of Care

OCC identified specific quality of care topics to support their ongoing efforts: (1) evaluation and refinement of established quality metrics; (2) initiation of quality improvement (QI) activities based on available quality metrics; (3) development of innovative methods to evaluate QI efforts; and (4) integration of care coordination and quality metrics to facilitate QI efforts. The metrics used, regardless of the source, should enable equitable comparisons between VA-delivered care and VA-purchased care; they should also account for the potential burden of any data reporting requirements to prevent overwhelming Community Care providers.

Community Care Providers' Knowledge of Veteran-specific Needs

OCC leadership would like to learn more about Community Care provider education and competency as it relates to providing Veteran care. Researchers were encouraged to develop and implement methods to ensure that Community Care providers are aware of Veterans' unique health risks (eg, opioid safety and suicide risk) as well as their medical and psychological conditions, such as cancer, chronic obstructive pulmonary disease, and posttraumatic stress disorder.¹² Other questions related to provider education and competency raised at the Forum for researchers to address included: How should provider education and competency be assessed? How is competency ensured over time? How can competency standards be consistently applied across VA and Community Care providers and/or tailored to provider specialty? Who should have responsibility for assessing Community Care providers: VA or its contractors? Researchers interested in Community Care provider education and competency must consider the regulatory and reimbursement environment of these providers, highlighting the importance of an OCC and researcher partnership to produce relevant and impactful outcomes.

Network Adequacy

OCC's priorities in this area are focused on understanding network adequacy standards associated with CCN performance. Current CCN contracts include standards for care proximity (ie, drive times), appointment scheduling (ie, wait times), and monthly meetings between VA facility staff and contractors to ensure that each network reflects local priorities and needs. For researchers interested in evaluating network adequacy, questions to consider include: (1) ascertaining whether a CCN's ability to meet the contractual network standards leads to improved access to care; (2) determining how VA can build long-term and sustainable relationships with its vast network of providers and whether they lead to greater access to care, increased provider and Veteran satisfaction, and better outcomes; (3) assessing what information both providers and Veterans would like that would be helpful in informing them about VA and Community providers and; (4) determining ways in which this information should be conveyed to be most useful.

Customer Service/Veteran Satisfaction

OCC is interested in understanding how Veterans make decisions about where to receive care and how customer service influences Veterans' choices about using VA or VCCP. The overarching goal of "customer service" is to ensure that Veterans are highly satisfied with the care they receive, which includes providing high-quality health care. Several research questions were posed by OCC for researchers to address: How do Veterans' experiences with their care providers and facility staff influence their decisions on where to seek care? Can VA researchers evaluate whether VA's effectiveness as an integrated health care delivery system is associated with efficacious customer service? How can existing consult management metrics be used to identify barriers to Veterans' use of VA services?

RESEARCH PRIORITIES

Similar to OCC, VA researchers are interested in ensuring that Veterans receive accessible, high-quality health care. However, researchers' priorities are primarily focused on generating new scientific knowledge to achieve this goal which often involves lengthy timelines.¹³ Although this paradigm is slowly changing with VA's transition to a Learning Health Care System, to accommodate basic differences between researchers' and operational partners' priorities and timelines, VA identified 3 models of research-practice relationships that can be effectively used to achieve mutual goals: (1) research produces scientific findings that subsequently inform clinical care and policies; (2) research and operations (eg, clinical programs) work together on common research priorities and implementation strategies; and (3) policy changes within VA's integrated health care system create natural experiments that generate evidence that can be used to evaluate the outcomes of these policies.¹⁴ The passage of Choice and MISSION means that OCC and VA researchers are likely using Models 2 and 3 to address current needs. Researchers need to develop and use methods to evaluate the implementation of VCCP regarding its effectiveness, outcomes, and costs and identify variations across facilities and Veterans Integrated Services Networks within VA.

Researchers have addressed VCP and VCCP initiatives slowly. Several foundational steps were needed: (1) understanding the actual process of expanded Community Care implementation and what that entailed; (2) identifying new data sources and assessing the quality of these data and; (3) understanding the data's strengths and limitations, and the inferences that can be made before addressing our research questions directly. OCC has supported our efforts, and in turn, we have provided OCC with research findings that can inform their policies and practices, whether it be with regard to data collected, clinical operations, or CCN contracts. The next few paragraphs present brief summaries of the work conducted by each of the research teams that participated in the Forum. The summaries include our research findings, the length of time from research initiation to findings, and how our research efforts informed OCC's needs and priorities presented earlier.

Care Coordination

To understand VA and VCP care coordination needs, and whether these needs differ by care type, we investigated Veterans' VA and Community Care use by primary care and specialty outpatient care from FY15 to FY18. We showed that Veterans' mix of service use over this period differed by race, age, comorbidity score, and rural residence. We also found that for Veterans using specialty services for sleep medicine diagnostic testing, there was a 47% increase over time on VA telehealth home testing, whereas home testing for Community Care services remained low. Further analyses showed that in-person testing studies were much more likely for VCP referrals, for persons living in rural areas, those with higher comorbidity scores, and for older Veterans (age 44 and over) compared with younger Veterans.¹⁵ During the Partnership Forum, we shared our current work in progress. This work suggests that Veterans' care coordination needs will likely differ for those seeking primary care than those seeking specialty services in the community due to different risk profiles and social determinants. This work, completed in ~3 years, informed OCC's priority to understand how to tailor care models to specific health conditions, patient populations, and align resources regardless of where patients receive care.

Quality of Care

While it is well known that VA generally performs similarly or better than non-VA settings on most nationally recognized measures of inpatient and outpatient quality,^{16–18} virtually little is known about differences in quality between VA and Community Care. To address this gap, we presented our research comparing 90-day postoperative complication rates of cataract surgery between VA and Community Care.¹⁹ We selected cataract surgery for the comparison because: (1) 90-day complication is a nationally endorsed outcome measure widely used in the United States; (2) it is a common procedure in the VA and US, with surgery rates increasing as the population ages; and (3) it is a well-defined, high-frequency procedure. Although we hypothesized that Veterans going to Community Care would have higher complication rates than those getting their cataract surgery in the VA due to the potential for fragmented care, this hypothesis was not supported by the data. In fact, we found no differences in complication rates after cataract surgery between VA and Community Care, even after adjusting for covariates such as sociodemographics and clinical characteristics through the use of a VA-specific risk-adjustment method.²⁰ This work, completed in <3 years, addressed OCC's priority of making equitable comparisons between VA-delivered care and VA-purchased care without adding additional data reporting requirements. Collaborations with OCC in this area will be particularly valuable for examining areas where QI initiatives are needed and to help inform "make versus buy" decisions for VA.

Network Adequacy

Our research team is interested in how VA network adequacy is measured, how network standards are associated with access, and how the network affects Veterans' health outcomes. We shared our foundational work from our Expert Panel meeting held in October 2017, which was attended by OCC.

The Panel discussed whether network adequacy measures used by other health care plans, states, or the Affordable Care Act could be adopted by the VA. The Panel noted several key challenges to applying non-VA network adequacy measures to the VA; these included needing a better understanding of VA's service capacity, network services demand, and limitations to provider reimbursement. The Panel recommended that VA develop different network standards by care type (eg, primary care vs. specialty care) and provide Veterans with network provider directories. This information helped inform network adequacy standards that have been incorporated into CCN contracts. Our work in progress focuses on how these new networks are functioning, identifying factors that facilitate (and hinder) successful VA/Community Care provider relationships, and Veterans' preferences for CCN provider information. Collaborations with OCC have been and will continue to be, essential to understanding how policy, data, markets, and health care use inform network adequacy and support a high-performing integrated health care system.

Our research addresses some of OCC's network adequacy priorities, but additional research involvement is needed and already underway. We have compiled an annotated list (Table 1) of all the current research efforts to date that we are aware of that have been funded. Most projects address multiple OCC priorities. In addition, Table 1 reveals the breadth and depth of these current efforts, which focus on specific types of care (eg, primary care, orthopedics, urgent care), specific Veteran populations (eg, rural Veterans, women Veterans), and different aspects of health care delivery (eg, resource hubs, telehealth). Appendix A (Supplemental Digital Content 1, <http://links.lww.com/MLR/C168>) provides definitions of acronyms used in Table 1. This work includes system-level examinations and will provide OCC with evidence-based information to guide implementation of VCCP.

FORMALIZING SUPPORT FOR OFFICE OF COMMUNITY CARE AND RESEARCH PARTNERSHIPS

Community Care Research Evaluation & Knowledge Center

The HSR&D/QUERI national meeting provided an opportune time to begin a conversation about how to formalize a more sustainable partnership between OCC and VA researchers. Shortly afterward, researchers from each of our 3 teams, and a representative from PEPReC, agreed to write a research proposal together that would use our existing partnership over the past few years as a backdrop for creating a larger partnership among all researchers interested in Community Care and OCC. This proposal was subsequently funded, and the Community Care Research Evaluation & Knowledge (CREEK) Center was established in late FY20.

CREEK's mission is to foster collaboration and knowledge diffusion in Community Care research between VA investigators and OCC to develop high quality and useful information that is aligned with both OCC priorities and VA research interests and needs. CREEK will serve as an information communications hub for OCC policy and practice

TABLE 1. Current VA CC Research and Related Activities

Care coordination

1. Behavioral Health Screening and Care Coordination for Rural Veterans in a Federally Qualified Health Center (ORH # 7345)
PIs: M. Bryant Howren, PhD, MPH; Thad E. Abrams, MD, MS
Study Design: Mixed-methods evaluation of Quality Improvement program
Methods: Process mapping, provider interviews, behavioral health screening data, care coordination, patient satisfaction
Specific Aims: (1) Screen all patients presenting for care at partner Federally Qualified Health Center (FQHC) for Veteran status using a standardized methodology; (2) screen all patients for behavioral health issues, including depression, anxiety, substance use disorder, and posttraumatic stress disorder (PTSD); (3) identify and assist interested, eligible Veteran patients with accessing VA care enrollment and services; (4) ensure Veteran patients screening positive for behavioral health issues are offered and/or receive timely behavioral health care at a VA facility, the FQHC partner, or other health care setting. The FQHC partner is part of the CCN
Focus: Care Coordination, Care Delivery
2. Care Coordination and Outcomes in the VA Expanded Choice Program (HRS&D SDR 18-321)
PI: Denise Hynes, PhD, MPH, BSN
Study Design: Mixed-methods observational study
Methods: Aims 1 and 2: Qualitative interviews with key informants from 6 sites
 Aims 3 and 4: Observational before after study design using routinely collected VA clinical administrative workload and VA CC authorization and claims data
Specific Aims: (1) Assess/summarize approaches used for regional and local VA facility implementation of quality, safety and value governance and monitoring under VCCP; (2) identify/evaluate organizational and health information exchange needs to support clinical care coordination and quality monitoring; (3) evaluate/compare process and outcomes-based quality measures for PC and specialty care among select high volume and high cost procedures; (4) develop/apply methods comparing the extent of overuse/duplication of services for Veterans authorized for VCCP vs. Veterans receiving care exclusively in VA
Focus: Care Coordination, Access, Care Delivery, Quality of Care, Health Care Utilization, PC, Specialty Care
3. Establishing Technology-facilitated MBC for Rural Veterans Through VA and Community Partners, (ORH 16024)
PIs: Carolyn Turvey, PhD; M. Bryant Howren, PhD, MPH
Study Design: Quality Improvement implementation/evaluation
Methods: Measurement of MBC adoption, patient and provider self-report regarding core MBC components, care coordination, mental health screening data
Specific Aims: (1) Implement and refine the process of MBC through repeated measurements of depression and PTSD in VA and community partner clinics using health information tools; (2) capture repeated assessment data of depressive and PTSD symptom severity to tailor mental health treatment for rural Veterans; (3) examine clinic adoption, fidelity, and clinical effectiveness of technology-facilitated MBC; (4) explore mental health care coordination opportunities for Veterans receiving care in VA and community partners
Focus: Care Coordination, Care Delivery
4. Evaluating Coordination of Specialty Care Within VA and With Non-VA Specialists (HSR&D FOP 20-190)
PI: Varsha Vimalananda, MD, MPH
Study Design: Cross-sectional survey study
Methods: Survey methods, mixed-level regression models, care coordination data
Specific Aims: (1) Compare care coordination for VA specialty care vs. VA-paid specialty care in the community, as experienced by VA PC providers and both VA and Community Care (CC) specialists; (2) describe the association between use of mechanisms to coordinate specialty care with coordination as experienced by VA PC providers and both VA and CC specialists
Focus: Care Coordination

Quality of care

5. Does Choice Equal Quality? A Mixed-Methods Comprehensive Evaluation of the Quality of CC Through the MISSION ACT vs. VA Care for Veterans With PTSD, Depression, and Chronic Pain (HSR&D SDR 19-287)
PI: Jennifer Manuel, PhD
Study Design: Mixed-methods evaluation
Methods: Qualitative interviews with VHA/VCCP clinicians and stakeholders, secondary data analysis comparing Veteran utilization of VCCP and VHA care
Specific Aims: (1) Compare Veteran utilization of VCCP and VHA care (ie, access to care, care type, intensity of services and cost) for 3 high-impact conditions: PTSD, depression and chronic pain; (2) obtain preliminary information about VCCP implementation (eg, usability, satisfaction, barriers and facilitators) and to determine important pragmatic and patient-centered clinical outcomes; (3) evaluate Veterans' and VCCP/VHA clinicians' experiences, satisfaction and quality of VCCP and VHA; (4) gain a deeper understanding of patient and clinician VCCP and VHA care experiences for PTSD, depression and chronic pain
Focus: Quality of Care
6. Optimizing CC for Veterans With Advanced Kidney Disease (HSR&D: IIR 18-032)
PI: Ann O'Hare, MD, MA
Study Design: Observational study comparing outcomes and care processes for Veterans who receive nephrology care within the VA vs. VCCP
Methods: CDW, USRDS registry (linked to VA data through VIREC), Medicare claims
Specific Aim: (1) Compare outcomes for Veterans with advanced kidney disease referred to community providers vs. those seen in VA facilities. To identify opportunities to improve delivery of CC for Veterans with advanced kidney disease
Focus: Quality of Care
7. Make Versus Buy—Examining the Evidence on Access, Utilization, and Cost: Are We Buying the Right Care for the Right Amount? (HSR&D: SDR 18-318)
PIs: Amy Rosen, PhD; Todd Wagner, PhD; Megan Vanneman, PhD
Study Design: Retrospective study examining utilization, quality of care, and costs of Veterans utilizing the Choice program (FY15-FY19) with specific focus on surgery and mental health
Methods: CDW (including the VHA's PIT) data, fee basis files; SHEP survey data

(Continued)

TABLE 1. Current VA CC Research and Related Activities (*continued*)

Specific Aims: (1) Examine variation in utilization of and access to VHA vs. CC over time (FY15-19); (2) develop and test a methodology to compare costs between VHA and CC; (3) examine use of specialty care, specifically surgery and mental health
Focus: Quality of Care, Access, Cost, Health Care Utilization

Network adequacy

8. Understanding Network Adequacy and Community Engagement in Veteran Care (HSR&D SDR 18-319)

PIs: Kristin Mattocks, PhD, MPH; Michelle Mengeling, PhD, MS

Study Design: An observational study investigating VA CCN, Veteran access, use, preferences

Methods: CDW (including PPMS), OCC Data (providers, authorizations), primary data collection

Specific Aims: (1) Develop and validate measures of network adequacy for non-VA CC and evaluate regional variations in network adequacy across Veterans in VA Medical Centers (VAMCs) and VA's 98 markets; (2) examine the process by which CC decisions are made at individual VA facilities, and to identify existing and potential opportunities to expand community partnerships to deliver CC; (3) interview Veterans regarding CC, including preferences for a network directory of providers and quality ratings of providers to more completely understand their perspectives on CC

Focus: Network Adequacy, Access, Patient Experience

Access

9. Understanding the Role of VA Specialty Care Resource Hubs and Their Potential Impact on Access in the Era of CC (HSR&D SDR 19-400)

PI: Megan Adams, MD, MSc

Study Design: Planning grant

Methods: Subspecialty workshops (gastrointestinal, oncology, and surgery), stakeholder interviews (leadership, providers, patients); environmental scans

Specific Aims: (1) Characterize the proposed organizational structure of specialty care resource hubs and understand how these hubs will be used to deliver comprehensive specialty care, with a particular focus on 3 key specialties that face access challenges and are therefore likely to be outsourced to CC; (2) understand how trainees can be integrated into specialty care resource hubs to address unmet demand for specialty care in underserved facilities and further educational/training objectives

Focus: Access, Care Delivery, Provider Workforce, Quality of Care

10. The Impact of Policy and Pandemic on Rural Veteran Access to PC (CARAVAN) (ORH OMAT # 15529)

PI: Melinda Davis, PhD

Study Design: Mixed-methods design

Methods: Geospatial mapping of PC deserts, qualitative data collection and analysis, utilization of a rural Veterans Advisory Board and use of group modeling building as a tool for integration of qualitative findings, intervention prioritization, innovation identification

Specific Aims: In Year 1—(1) Identify/map PC deserts in Oregon; (2) extend to other Northwestern states; (3) examine rural Veteran experiences accessing VA and non-VA PC services following implementation of the MISSION Act. In Year 2—(1) assess impact of COVID-19 on access to VA and non-VA PC clinics; (2) describe rural Veteran and PC clinician perceptions on the availability, accessibility, accommodation, affordability and acceptability of PC for rural Veterans in relationship to changes from COVID-19; (3) identify intervention priorities and associated innovations to improve rural Veteran access to care

Focus: Access, Patient Experience, Other: COVID-19 Impact

11. Community REQUEST: Community Specialty Referrals—Access and Quality Evaluation (HSR&D SDR 19-099)

PI: Susan Diem, MD, MPH

Study Design: Planning grant

Methods: Literature review, stakeholder interviews including Veteran engagement panels

Specific Aims: (1) Select 2 high priority areas of specialty care referrals, and address gaps in VA metrics on actual and perceived access for new appointments in these areas of VA provided and VA community specialty care; (2) select quality metrics and address gaps in VA measures of patient experience for the 2 high priority areas of specialty care; (3) develop plan for regional evaluation of MISSION Act policies on achieved access, quality, and patient experience for VA provided and VA community specialty care

Focus: Access, Quality, Patient Experience

12. Performance Variation Across CC Programs Serving Rural Veterans (ORH #1142)

PI: Deborah Gurewich, PhD

Study Design: Quantitative methods evaluation of the CC program

Methods: VA administrative and SHEP data, outpatient specialty care use and use patterns, linear and logistic regression

Specific Aims: (1) Examine wait times for CC vs. VA care for both rural and urban Veterans; (2) examine patient experience for CC vs. VA care for both rural and urban Veterans; (3) examine avoidable hospitalizations for CC vs. VA care for both rural and urban Veterans

Focus: Access, Patient Experience, Quality of Care

13. QUERI for Team-based Behavioral Health-Mission Act Section 506 Proposal (QUERI Supplemental Funding PEC 15-289)

PI: Monica Matthieu, PhD, MSW

Study Design: Spatial analysis

Methods: CDW, ADUSH Enrollment Files, MCA NDEs, PSSG Geocoded Enrollee File, VAST database

Specific Aim: (1) This proposal focuses on additional work to support our operational and clinical partners focused on selection of locations, engagement with community providers, and reports to Congress

Focus: Access, Provider Workforce, Patient Experience: Congressional mandated policy analysis and evaluation

14. Veterans' Choice in Hospital Care (HSR&D: IIR 18-092)

PI: Jean Yoon, PhD, MHS

Study Design: Quantitative only, longitudinal study: pre-post VCP

Methods: Quantitative only, longitudinal study: pre-post VCP

Specific Aim: (1) A comprehensive examination of the use of VA and non-VA care, total VA spending, and outcomes is needed to guide the development and expansion of CC programs like the VCCP. Therefore, we will estimate the change in utilization and spending on VA-provided and VA-sponsored care in the context of other non-VA care (primarily Medicaid expansion). We will also study which patient characteristics and VA hospital characteristics influenced Veterans' choice of VA or CC providers. Finally, we will examine the impact of the Veterans Choice Program on hospital mortality for hospitalized patients

Focus: Access, Care Coordination, Quality of Care

(Continued)

TABLE 1. Current VA CC Research and Related Activities (continued)

15. Enhancing Veterans' Access to Care through Video Telehealth Tablets (HSR&D I01HX002127-01A2 and ORH (QUERI PEI); PEC 18-205)
PI: Donna Zulman, MD, MS
Study Design: Mixed methods, implementation evaluation
Methods: Analysis of data from CDW, PSSG, CC, VA tablet distribution center (DALC), tablet contractor (Ironbow), provider interviews, and patient surveys
Specific Aims: (1) To understand and enhance the effectiveness and implementation of tablet distribution to high-need Veterans with access barriers; (2) to evaluate the effectiveness of the tablet problem and the digital divide consult in reaching high-risk patients; (3) to examine the program's sustainability through a budget impact analysis
Focus: Access, Care Delivery, Cost
- Customer service/Veteran satisfaction
16. Optimizing Veteran Decision-Making About Use of VA and Non-VA Health Care (HSR&D Merit Award: IIR 18-239)
PI: Jeffery Kullgren, MD, MPH, MS
Study Design: Mixed methods
Methods: Interviews, focus groups, survey to create a compendium of the types of information Veterans use and need for decision-making about VA and non-VA care
Specific Aims: (1) Examine how Veterans are making decisions about VA and non-VA care and what information they want to use when making these decisions; (2) identify correlates of Veterans' decisions to use and experiences with using VA and non-VA health care; (3) engage Veterans and VA leaders to identify opportunities to optimize Veterans' decisions about use of VA and non-VA care and VA's responsiveness to Veterans' health care preferences
Focus: Patient Experience
- Health care utilization
17. CC Utilization Among Post-9/11 Veterans with Traumatic Brain Injury (HSR&D IIR 19-445)
PI: Kathleen Carlson, PhD, MS
Study Design: Observational, mixed methods
Methods: Administrative data analysis, Veteran survey, Veteran interviews
Specific Aims: (1) Describe utilization of VA CC among post-9/11 Veterans with traumatic brain injury; (2) estimate associations between cc use and health and functional outcomes among post-9/11 Veterans with traumatic brain injury; (3) understand Veterans' need for, perceptions of, and experiences with VA CC
Focus: Health Care Utilization, Quality of Care, Patient Experience
18. CC Urgent Care Utilization and Experiences During the COVID-19 Pandemic (HSR&D PPO 18-258)
PI: Kristina Cordasco, MD, MPH, MSHS
Study Design: Mixed methods
Methods: Quantitative analysis of claims data, augmented by patient characteristics from VA CDW, Veteran interviews
Specific Aims: (1) Examine Veterans' use of the CC urgent care benefit since the start of the COVID-19 pandemic, including use of CC telehealth care, and use for potential COVID-19 testing and illness; (2) explore Veterans' decision-making, satisfaction, and coordination experiences with CC urgent care telehealth and COVID-19 testing visits
Focus: Health Care Utilization, Patient Experience, Care Coordination, Other: COVID-19 Impact
19. Rural Women Veterans Use of VA-provided and VA-purchased Health Care (ORH #15022)
PI: Michelle Mengeling, PhD, MS
Study Design: Secondary data analyses
Methods: VA administrative data (CDW, PIT), descriptive statistics, bivariate analyses, logistic regression
Specific Aims: (1) Investigate differences in rural versus urban women Veterans' participation in VHA CC programs, telemedicine, and mobile clinic use; (2) examine the association between use of VHA Women's health clinics and increased/decreased use of VHA's CC; (3) examine the impact of VHA CC use on attrition from VHA
Focus: Health Care Utilization
20. Use and Cost of Low-value Health Services by Veterans in VA and Non-VA Settings (HSR&D IIR 19-089)
PI: Carolyn Thorpe, PhD, MPH
Study Design: Mixed methods, retrospective cohort study, qualitative analysis
Methods: Administrative health care data, claims-based measure of 31 low-value health services, cost estimates, multilevel modeling, latent profile analysis, provider interviews
Specific Aims: (1) Quantify utilization and costs of low-value health services provided to VAMCs and in non-VA health care facilities through VCCP, and characterize variation across VAMCs in low-value services provided in each setting; (2) quantify utilization and costs of low-value health services provided to Veterans in VAMCs and non-VA facilities through their Medicare benefits, and characterize variation across VAMCs provided in each setting; (3) identify barriers and facilitators to de-implementing different types of low-value health services in VA and non-VA health care settings
Focus: Health Care Utilization, Cost, Quality of Care
21. Utilization and Health Outcomes for Veterans With Expanded Health Care Access (HSR&D IIR 19-421)
PI: Todd Wagner, PhD
Study Design: Quantitative regression models based on a regression discontinuity study design
Methods: VA Data, MEPS, Medicare FFS, and seeking state all payer claims data from a few large states
Specific Aims: (1) Understand the causal impact of gaining Medicare eligibility on VA enrollees' health care utilization and health outcomes on the VA system, procedures and diagnosis groups; (2) understand the causal impact of becoming eligible for CC on VA enrollees' health care utilization and health outcomes on the VA system, procedures and diagnosis groups; (3) identify subgroups that predict access gaps
Focus: Health Care Utilization
22. Access to and Choice of VA or Non-VA Health Care by Veterans of Recent Conflicts (HSR&D CDA 15-259)
PI: Megan Vanneman, PhD, MPH
Study Design: Iterative mixed methods

(Continued)

TABLE 1. Current VA CC Research and Related Activities (*continued*)

Methods: In-depth interviews, hierarchical modeling, design of health information technologies
Specific Aims: (1) Learn what information and resources VA facility and VISN leaders need to better understand and manage enrollment rates and reliance rates for primary and mental health care; (2) derive insights on facility factors by evaluating relationships among enrollment rates, reliance rates, access to care, and quality of care for primary and mental health care; (3) develop or modify existing information tool(s) to assist facility and VISN leaders to manage enrollment and reliance rates for primary and mental health care
Focus: Health Care Utilization, Access, Quality of Care

23. Veterans Access to Emergency Care (HSR&D: IIR 16-266)
PI: Anita Vashi, MD, MPH, MHS
Study Design: Mixed-methods design
Methods: Survey methods, quantitative analysis of VA and non-VA (Medicare and state data) administrative data, qualitative interviews
Specific Aims: Understand Veteran use of emergency care (ED) in VA/non-VA and the long-term consequences of non-VA ED use on subsequent VA reliance. (1) Inventory VA ED resources and capabilities; (2) calculate VA and non-VA ED utilization rates and identify patient, facility, and community-level predictors of VA ED use/reliance; (3) characterize Veterans' preferences, resources and contextual factors influencing ED setting choice; during COVID-19 pandemic; (4) examine how VA/non-VA acute care visits changed; (5) estimate reductions in VA in-person outpatient care impact on acute care use and mortality
Focus: Health Care Utilization, Quality of Care, Patient Experience, Other: COVID-19 impact

Care delivery

24. Integrating Systems and Non-VA Care Delivery in the Evolving VA CCN (HSR&D SDR 19-121)
PI: Eve Kerr, MD, MPH
Study Design: Planning Grant
Methods: CDW, VA/CMS, Medicare (for non-VA), PIT, PPMS, HPP data, primary qualitative data collection
Specific Aims: (1) Characterize VA CCN's current performance measurement infrastructure and highlight areas in which cross-system measurement and more robust measures of system performance can inform front-line decisions, ongoing monitoring, and VA CCN regional market evaluation; (2) identify methods, metrics, and data elements needed for future studies that compare VA and non-VA care delivery systems on key quality, resource use, and system characteristics, to evaluate current performance and predict the effect of different types of contracting in evolving VA CCN regional markets
Focus: Care Delivery, Access

25. MISSION Act Section 506 Project (OMHSP)
PI: Monica Matthieu, PhD, MSW
Study Design: Summative mixed-methods evaluation
Methods: CDW, VAST database (implementation facilitation and outreach), qualitative interviews
Specific Aim: (1) The main evaluation goal is to determine the overall impact of implementing Peers in Patient Aligned Care Team as part of the MISSION Act Section 506 to promote the use and integration of services for mental health, substance use disorder, and behavioral health in a PC setting. In addition, we will assess the effectiveness of peers to expand their role to engage with community health care providers and Veterans served by those providers as well as the benefits of the program to Veterans and family members of Veterans
Focus: Care Delivery, Access, Patient Experience: Congressional mandated policy analysis and evaluation

Other: Attrition

26. Attrition of Women Veterans New to VHA in the CC Era (HSR&D: IIR 18-116)
PIs: Susan Frayne, MD, MPH; Alison Hamilton, PhD, MPH
Study Design: Convergent parallel mixed methods
Methods: Secondary analysis of multiple administrative databases (Aims 1 and 2); primary qualitative data collection with key VA stakeholders (Aim 3) and women Veteran VA patients (Aim 4)
Specific Aims: (1) Model CC and other factors expected to predict attrition from VA (2); examine the longitudinal attrition trajectory pre/post expansion of CC; (3) characterize the facility-level context of CC, to triangulate with Aims 1 and 2 results and inform Aim 4; (4) examine women's experiences of care and their perspectives on the relationship between CC and plans for future VA use
Focus: Other: Attrition, Patient Experience

Other: Implementation

27. Interfacility Transfers: Enhancing Access to Emergency Care for Rural Veterans (ORH 10808)
PI: Mike Ward, MD, PhD, MBA
Study Design: Prospective observational
Methods: Implementation, quality improvement
Specific Aims: (1) Disseminate an ED/Urgent Care Clinic-based telemedicine intervention across 8 Tennessee Valley Healthcare System Community-based Outpatient Clinics in Tennessee, Southern Kentucky, and Northern Georgia to benefit rural Veterans with mental health emergencies; (2) to evaluate the preliminary impact of this program, implement national interfacility transfer quality metrics; these will also be used to identify future opportunities to identify and address disparities for rural transfer
Focus: Other: Implementation, Quality of Care, Care Coordination

Other: Resource allocation

28. Partnered Evidence-based Policy Resource Center—National Access and Clinic Administration Evaluation and CC Technical Assistance (ORH, OVAC, and QUERI PEC 16-001)
PI: Austin Frakt, PhD
Study Design: Observational data analyses, randomized evaluation
Methods: Metrics creation, observational analyses of CDW and V-Signals data, predictive modeling
Specific Aims: These are evaluation activities under operations. Partnered activities with OVAC include: (1) development of algorithms to characterize underserved facilities to comply with Section 401 of the MISSION Act (PC and specialty care); (2) evaluation of the Section 401 models; (3) evaluation of impact of medical scribes on provider efficiency and patient experience (Section 507). Partnered activities with OCC include development of wait time measures by specialty
Focus: Other: Resource Allocation, Provider Workforce, Access

(Continued)

TABLE 1. Current VA CC Research and Related Activities (continued)

Other: Infrastructure

29. CC/MISSION Act Virtual Research Network (HSR&D DR 19-327)
PI: Melissa Garrido, PhD
Role: Virtual research network
Methods: Study design, measures, regular meetings with researchers and operational partners
Specific Aim: (1) Facilitation of communication between OCC and researchers evaluating CC and impact of MISSION Act, technical assistance to researchers on metrics and study design
Focus: Other: Infrastructure

30. Community Care Research Evaluation & Knowledge (CREEK) Center (HSR&D SDR 20-390)
PIs: Kristin Mattocks, PhD, MPH; Michelle Mengeling, PhD; Amy Rosen, PhD; Megan Vanneman, PhD; Denise Hynes, PhD; Melissa Garrido, PhD
Role: Policy and data expertise hub to share and disseminate information across research and operations
Methods: Needs assessment, Web site (www.hsrdr.research.va.gov/centers/creek.cfm), Twitter (@VA_CREEK), quarterly meetings
Specific Aim: To foster collaboration and knowledge diffusion in CC research between VA investigators and VA OCC to support the aims of both VA CC researchers and VA OCC leadership to develop high quality, useful information aligned with VA OCC policy and priorities
Focus: Other: Infrastructure

CC indicates Community Care; CCN, Community Care Network; CDW, Corporate Data Warehouse; CMS, Centers for Medicare and Medicaid Services; COVID-19, coronavirus disease 2019; ED, emergency department; FFS, Fee-for-Service; FY, fiscal year; HPP, High Performing Provider; HSR&D, Health Services Research and Development Service; MBC, measurement-based care; MEPS, Medical Expenditure Panel Survey; OCC, Office of Community Care; OMHSP, Office of Mental Health and Suicide Prevention; ORH, Office of Rural Health; OVAC, Office of Veterans Access to Care; PC, primary care; PIT, Program Integrity Tool; PPMS, Provider Profile Management System; QUERI, Quality Enhancement Research Initiative; SHEP, Survey of Healthcare Experiences of Patients; USRDS, United States Renal Data System; VA, Veterans Affairs; VCCP, Veterans Community Care Program; VCP, Veterans Choice Program; VHA, Veterans Health Administration; VISN, Veterans Integrated Services Network.

changes, ongoing Community Care research efforts, and Community Care data support.

Care are invited to these calls, from those currently funded to those who are considering future Community Care grants.

Community Care Research Evaluation & Knowledge and Community Care Data

One of CREEK’s goals is to ensure that researchers have access to historical, as well as current, information about Community Care data. Because our research teams, and PE-PRc, have been working with these data for over 5 years, we are able to provide the historical context. This is essential because over time, Community Care policies have changed, and new types of data and data sources have become available. Thus, the use of these data requires an in-depth understanding of both the data and programmatic changes at specific points in time. To accomplish this goal, CREEK is developing an analytic support infrastructure to provide researchers with answers to routine Community Care questions, and an online, shared platform that allows researchers to work together on common data issues. It will also enable researchers to receive OCC data support by streamlining and consolidating questions that arise from the wider field of researchers.

Community Care Research Evaluation & Knowledge and Community Care Researchers

There are about 30 currently funded VA projects focusing on Community Care (Table 1) and we expect this list will grow and diversify over time. A CREEK initiative is to support connections among these researchers as well as those interested in undertaking research related to Community Care, with the goal of creating greater opportunities for collaboration and information sharing. To foster this, in the Fall of 2020, CREEK began holding quarterly calls, open to researchers interested in VA Community Care, to: (1) discuss policy and program updates; (2) share research findings; and (3) discuss data issues and challenges. All HSR&D researchers interested in learning more about Community

CONCLUSIONS

As the VA evolves into a Learning Health Care System, HSR&D recognizes the importance of partnerships between researchers and operations, such as OCC, so that research can be translated efficiently into real-world practices. HSR&D has demonstrated their support for Community Care partnerships by providing funding and facilitating access to OCC partners and by offering opportunities for OCC and researchers to engage with one another at meetings and conferences, such as the Partnership Forum, which was sponsored by HSR&D/QUERI. CREEK represents an important step in creating and supporting a sustainable partnership between OCC and HSR&D researchers.

This manuscript does not provide a comprehensive catalog of Community Care research needs; rather, it focuses on the importance of partnerships and highlights areas where research can inform OCC’s current priorities and questions, and similarly, how OCC can facilitate research ideas and efforts. It also emphasizes the importance of providing researchers with the tools and information they need to conduct salient research projects. As VCCP continues to expand with the implementation of the MISSION Act, partnerships such as these, and outcomes such as CREEK, will become invaluable to promoting the goals of VA’s Learning Health Care System.

ACKNOWLEDGMENTS

The authors thank Dr Melissa Garrido, Associate Director of the Partnered Evidence-Based Policy Resource Center (PEPRc) and Dr Todd Wagner, Director of the Health Economics Resource Center (HERC) for their involvement and support of the Partnership Forum and the Community Care Research Evaluation & Knowledge (CREEK) Center.

REFERENCES

1. Veterans Health Administration. Veterans Choice Program Eligibility Details. In: US Department of Veterans Affairs; 2015.
2. Kilbourne AM, Braganza MZ, Bowersox NW, et al. Research lifecycle to increase the substantial real-world impact of research: accelerating innovations to application. *Med Care*. 2019;57:S206–S212.
3. Russ-Sellers R, Hudson MF, Youkey JR, et al. Achieving effective health service research partnerships. *Med Care*. 2014;52:289–290.
4. Sinopoli A, Russ-Sellers R, Horner RD. Clinically driven health services research. *Med Care*. 2014;52:183–184.
5. Horner RD, Russ-Sellers R, Youkey JR. Rethinking health services research. *Med Care*. 2013;51:1031–1033.
6. Mattocks K, Elwy A, Yano E, et al. Developing network adequacy standards for VA Community Care. *Health Serv*. [Epub ahead of print].
7. VA Mission Act of 2018, Pub. L. No. 115-182, 132 Stat. 1393 (2018). Available at: <https://www.congress.gov/115/plaws/publ182/PLAW-115publ182.pdf>. Accessed January 2, 2021.
8. Greenstone CL, Peppiatt J, Cunningham K, et al. Standardizing care coordination within the Department of Veterans Affairs. *J Gen Intern Med*. 2019;34:4–6.
9. Axon RN, Gebregziabher M, Everett CJ, et al. Dual health care system use is associated with higher rates of hospitalization and hospital readmission among veterans with heart failure. *Am Heart J*. 2016;174:157–163.
10. Halanych JH, Wang F, Miller DR, et al. Racial/ethnic differences in diabetes care for older veterans: accounting for dual health system use changes conclusions. *Med Care*. 2006;44:439–445.
11. Cordasco KM, Hynes DM, Mattocks KM, et al. Improving care coordination for veterans within VA and across healthcare systems. *J Gen Intern Med*. 2019;34:1–3.
12. Eibner C, Krull H, Brown K, et al. *Current and Projected Characteristics and Unique Health Care Needs of the Patient Population Served by the Department of Veterans Affairs*. Santa Monica, CA: RAND Health; 2015.
13. Green LW, Ottoson JM, Garcia C, et al. Diffusion theory and knowledge dissemination, utilization, and integration in public health. *Annu Rev Public Health*. 2009;30:151–174.
14. Atkins D, Kilbourne AM, Shulkin D. Moving from discovery to system-wide change: the role of research in a learning health care system: experience from three decades of health systems research in the Veterans Health Administration. *Annu Rev Public Health*. 2017;38:467–487.
15. Weaver FM, Hickok A, Prasad B, et al. Comparing VA and community-based care: trends in sleep studies following the Veterans Choice Act. *J Gen Intern Med*. 2020;20:2593–2599.
16. O'Hanlon C, Huang C, Sloss E, et al. Comparing VA and non-VA quality of care: a systematic review. *J Gen Intern Med*. 2016;32:105–121.
17. Price RA, Sloss EM, Cefalu M, et al. Comparing quality of care in Veterans Affairs and non-Veterans Affairs settings. *J Gen Intern Med*. 2018;33:1631–1638.
18. Blay E, DeLancey JO, Hewitt DB, et al. Initial public reporting of quality at Veterans Affairs vs non-Veterans Affairs hospitals. *JAMA Intern Med*. 2017;177:882–885.
19. Rosen AK, Vanneman ME, O'Brien WJ, et al. Comparing cataract surgery complication rates in veterans receiving VA and community care. *Health Serv Res*. 2020;55:690–700.
20. Wagner T, Stefos T, Moran E, et al. *Risk Adjustment: Guide to the V21 and Nosos Risk Score Programs: Technical Report 30*. Menlo Park, CA: VA Palo Alto, Health Economics Resource Center; 2016.