

PROVEN Hub Newsletter

August 2024

Welcome to the PROVEN Hub Newsletter!

The PROVEN Hub is designed to provide a single point of contact for the VA research community to design, conduct, and disseminate cutting-edge, operationally prioritized research and evaluation in support of a safe, effective, and efficient implementation of the Federal EHR throughout VA.

Join Us for Our Upcoming Virtual EHRM Research Summit: Driving EHRM Excellence Through Research and Evaluation	
Friday, September 20, 2024 1:00-4:00 pm ET / 10:00 am-1:00 pm PT	
Register now!	

Agenda

1:00-1:20 pm ET (10:00-10:20 am PT) Welcome and Overview of Summit Goals Becky Yano, PhD, MSPH, PROVEN Coordinating Hub MPI – Administrative & Implementation Cores, VA HSR Center for the Study of Healthcare Innovation, Implementation & Policy, VA Greater Los Angeles

Opening Remarks

Carolyn Clancy, MD, MACP, Assistant Under Secretary for Health for Discovery, Education, and Affiliate Networks (DEAN)

Conducting Research with the New Federal EHR: An Update from the National Research Council and the ORD Office for the Sustainment and Implementation of Research EHR Solutions (OSIRES)

Maria Souden, MSI, PhD, Director, VA Information Resource Center (VIReC), Interim Director, Office of Research & Development (ORD) Office for the Sustainment and Implementation of Research EHR Solutions (OSIRES), Co-Chair, EHR Modernization National Research Council

1:20-2:15 pm ET (10:20-11:15 am PT)	Panel Discussion: Updates on EHRM Research Moderator: Seppo Rinne, MD, PhD, PROVEN Coordinating Hub MPI – Partnership & Engagement Core; Core Investigator, Center for Healthcare Organization & Implementation Research (CHOIR), VA Bedford
	 Panelists: Sarah Cutrona, MD, MPH, Associate Director, Center for Healthcare Organization & Implementation Research (CHOIR), VA Bedford; Professor, Division of Health Informatics and Implementation Science, University of Massachusetts Chan Medical School Julian Brunner, PhD, Core Investigator, Center for the Study of Healthcare Innovation, Implementation and Policy (CSHIIP), VA Greater Los Angeles Healthcare System Ellen Ahlness, Qualitative Methodologist, VA Puget Sound; Clinical Associate Professor, University of Washington Department of Health Systems and Public Health Edwin Wong, PhD, MA, Core Investigator, VA Puget Sound; Associate Professor, University of Washington School of Medicine
2:15-2:55 pm ET (11:15-11:55 am PT)	Panel Discussion: EHRM Research Development, Federal EHR Data, and Approaches to New Federal EHR-based Interventions Moderator: Jessica Davila, PhD, PROVEN Coordinating Hub – Data & Methods Core MPI; Core Investigator, Center for Innovations in Quality, Safety and Effectiveness (iQuESt), VA Houston
	 Panelists: Jianji Yang, PhD, Integrated Informatics Director, Electronic Health Record Modernization Integration Office (EHRM-IO); Associate Professor, Oregon Health & Science University Jennifer Herout, PhD, Chief Human Factors Scientist for Human Systems Integration, Digital Health Office, VA Omaha Ashok Reddy, MD, MS, Core Investigator, VA Puget Sound; Associate Professor, University of Washington School of Medicine
2:55-3:35 pm ET (11:55am-12:35pm PT)	Panel Discussion: The Future of VA Health Informatics Research in the Context of EHRM and AI Moderator: <i>Michael Weiner, MD, MPH, PROVEN Coordinating Hub –</i> <i>Health Informatics Core MPI; VA Indianapolis</i>
	 <u>Panelists</u>: Michael Matheny, MD, MS, MPH, FACMI, Associate Director, VA Informatics & Computing Infrastructure (VINCI), Tennessee Valley VA; Director, Center for Improving the Public's Health through Informatics, Vanderbilt University Mikhail Kuprian, MD, Lead Data Scientist, Office of Connected Care, VA Eastern Colorado Health Care System Westyn Branch-Elliman, MD, MMSc, Acting Director of Health Sciences-AI, VA National Artificial Intelligence Institute (NAII), Digital Health Office; Attending Physician, Infectious Diseases, VA Boston Healthcare System; Associate Professor, Harvard Medical School

3:35-3:45 pm ET (12:35-12:45 pm PT)	The Role of the Office of Health Informatics in EHR Modernization Jonathan Nebeker, MD, Executive Director, Clinical Informatics, Office of Health Informatics (OHI)
3:45-3:55 pm ET (12:45-12:55 am PT)	Vision for EHRM Moving Forward: View from the Top Neil Evans, MD, Acting Program Executive Director, VA Electronic Health Record Modernization Integration Office (EHRM-IO)
3:55-4:00 pm ET (12:55-1:00 pm PT)	Closing Remarks Steven Simon, MD, MPH, PROVEN Coordinating Hub – Administrative Core MPI (Co-Lead); Chief of Staff, VA Greater Los Angeles Healthcare System

HSR Research and EHR Synergy Cyberseminar Series

User Experience and Lessons from the Latest EHR Modernization Site

Wednesday, October 9, 2024 12:00pm ET/9:00am PT

Register now

Presenters: Seppo Rinne, MD, PhD and Julian Brunner, PhD

This cyberseminar will present results from surveys and interviews conducted with employees at Lovell FHCC—the most recent site to transition to the new Federal EHR. The session will include perspectives about the transition process, the new federal EHR, and its impact on care, with comparisons to a current CPRS site and a prior EHR transition site. Attendees will gain an understanding of the experience of front-line clinicians during the EHR transition, lessons learned for future transition sites, and implications for initiatives to improve VA's EHR modernization.

Check out the archive of previous presentations in this series.

Next in our series: Wednesday, October 23, 2024 Julian Brunner, PhD, Jessica Davila, PhD, Alexis Amano, MS, Lauren Gauntlett, MPH, and Sarah Krein, PhD, RN, will describe qualitative findings of nursing experiences from three non-VA facilities that underwent an EHR transition, including key lessons and recommendations for future implementation within VHA. Registration details will be available soon.

HSR Announces Recipients of the Health System Impact Award

Congratulations to the two winners of the 2023 <u>HSR Health System Impact Award</u>: **Seppo Rinne**, **MD**, **PhD**, of HSR's Center for Healthcare Organization and Implementation Research (<u>CHOIR</u>) and VA Bedford Healthcare System; and **Leslie Hausmann**, **PhD**, **MS**, of HSR's Center for Health Equity Research and Promotion (<u>CHERP</u>) and VA Pittsburgh Healthcare System! The award honors HSR- and QUERI-funded research that has had a direct and important impact on clinical practice or clinical policy within VA healthcare—and that has been successfully translated into VA policy or operations.



Seppo Rinne, MD, PhD

Dr. Rinne is a practicing pulmonologist, critical care physician, and board-certified informaticist who leads several QUERI- and HSRfunded initiatives focused on VA's Electronic Health Record Modernization (EHRM). Through his leadership of QUERI's EHRM Partnership Integrating Rapid Cycle Evaluation to Improve Cerner Implementation (<u>EMPIRIC</u>), Dr. Rinne and his team have demonstrated EHRM issues with user experience, Veteran safety, and organizational readiness that influenced VA decision-making about the EHRM rollout, providing evidence-based insights to the Under Secretary for Health, EHRM leaders, and field-based leaders. Dr. Rinne also leads QUERI's Strengthening Cerner Implementation for Health Professions Trainees to Optimize Learning and Reinforce Veteran Care (<u>SCHOLAR</u>), which partners with VA's Office of Academic Affiliations to assess and improve trainees'

experiences with EHRM. This evaluation identified unique challenges that trainees face during EHRM, leading to the development of a Health Professions Trainee Council and guiding targeted initiatives that have improved onboarding and training with the new EHR system. Collectively, this work has raised awareness of user concerns and laid the groundwork for a learning health system approach that can progressively improve user experience and EHR use in VA.



Leslie Hausmann, PhD, MS

Dr. Hausmann is a social psychologist and former HSR Career Development Awardee who currently serves as Associate Director of CHERP. She received the 2023 HSR Health System Impact Award for leading the development and dissemination of the VHA Primary Care Equity Dashboard (<u>PCED</u>), an innovative tool designed to promote equity-guided quality improvement by empowering the VHA workforce to identify and address healthcare inequities affecting their patient populations. By identifying demographic subgroups that are experiencing disparities in key quality measures within and across VA medical centers, the PCED provides a roadmap for qualityimprovement teams and an implementation tool for researchers as they design, implement, and evaluate equity-focused initiatives. It has become a powerful, widely used tool for advancing equityguided projects at local, regional, and national levels, with more than

6,400 active users based at 130 VAMCs spanning all 18 VISNs, as well as operational leaders based in VA Central Office. The PCED has been adopted by the VA Office of Health Equity as a flagship tool for education and outreach and was cited in VA's enterprise-wide Equity Action Plan to support the strategy priority to "advance equity by reducing health disparities, ensure access to high-quality health care for every eligible Veteran, and use equity-informed approaches to better reach underserved Veterans."

HSR is grateful to Drs. Rinne and Hausmann for their valuable research, dedication, and continuing contributions toward improving the VA healthcare system and the care we provide for our Veterans.

Program Office Spotlight: Office of Health Equity

An Analysis of Race and Ethnicity in VHA Millennium and VistA/CPRS Health Records Eve Sonnier, Kenneth Jones, Ashley Bowman, Lauren Korshak, and Sarah Leder Office of Health Equity, Veterans Health Administration March 21, 2024

The VHA Office of Health Equity (OHE) is charged with reducing disparities in health and healthcare affecting Veterans and enabling all Veterans to achieve equitable health outcomes. OHE recently conducted an analysis of Veteran race and ethnicity data unique to VA's new Federal EHR system (formerly Cerner Millennium/Oracle) and its impact on VHA's race and ethnicity data in relation to existing Veteran race and ethnicity data in VA's legacy VistA/CPRS system.

A direct comparison was conducted using data for Veterans who had corresponding records in VistA/CPRS and the Federal EHR. Data stored in VA's Corporate Data Warehouse (CDW) database system was utilized for the analysis. Structured Query Language was used to query the CDW to identify unique patients who had a record in the Federal EHR and a corresponding record in VistA/CPRS. To incorporate Veteran race and ethnicity data from the Federal EHR into the existing OHE race and ethnicity Data Object Exchange table, records were linked on unique patient identifiers. CDWWork3 database was used to link Veteran data from the Federal EHR to compare VistA/CPRS data in CDWWork. Variables were created for Combined Race and Ethnicity values using the same methods for Vista/CPRS and Federal EHR data using OMB guidelines.

OHE's analysis found that inclusion of Federal EHR records increases the completeness rate of VHA's race and ethnicity data, and the 91.8% data congruence between the two records provides valuable evidence in ongoing data validation. However, limitations exist. For example, the CDWWork2 and CDWWork3 databases only contain one value of race per Veteran from the Federal EHR, regardless of whether additional races are documented across the medical record history, and there is no ability to select more than one race. VistA/CPRS also does not have a single documentation option for multi-racial Veterans, but the CDWWork database captures all race values entered for a Veteran historically in VistA/CPRS. Millennium records also include a categorization of "Other Race," which does not exist in VistA/CPRS.

While allowing Veterans to self-identify and update their race and ethnicity is the gold standard, future work should include tracking the completeness and accuracy of race and ethnicity data across the enterprise, as impacted by the inclusion of Federal EHR data, as well as investigation into potential solutions for documenting more than one race in Millennium. Continuing to improve accuracy and completeness of race and ethnicity records is integral to VHA effectively meeting the needs of Veterans and delivering high quality, Veteran-centered care as the largest integrated health care provider in the United States. VHA's EHR modernization effort presents a unique opportunity, as the new Federal EHR is being assessed on all fronts, to ensure race and ethnicity record completeness increases and data quality and consistency improves across all VA documentation systems.

VA EHRM Researcher Spotlight

Saul Weiner, MD Jesse Brown VA Medical Center University of Illinois at Chicago College of Medicine



Saul Weiner, MD

Dr. Weiner is Deputy Director of the VHA Center of Innovation for Complex Chronic Health Care and Professor of Medicine, Pediatrics and Medical Education at the University of Illinois at Chicago. Dr. Weiner's research focuses on assessing and improving clinician attention to patient life context in care planning, a process referred to as "contextualizing care." He's also developed the concept of "contextual error," which occurs when a care plan is consistent with research evidence but nevertheless inappropriate because of inattention to a patient's specific circumstances or behaviors, i.e., the patient's context. In 2022, with funding from AHRQ he published the results of a randomized controlled trial demonstrating the effectiveness of clinical decision support tools his team designed outside the VA in Oracle Health/Cerner to prevent contextual errors. His research team has recently received VA HSR funding to bring

those tools into the new Federal EHR and, in partnership with the Office of Health Informatics, test them in a simulation effectiveness study with

the help of physicians at VA facilities that have gone live with the Federal EHR.

Dr. Weiner's book, *Listening for What Matters: Avoiding Contextual Errors in Health Care* (Oxford University Press) received the American Publishers Award for Professional & Scholarly Excellence in the life sciences from the American Association of Publishers, and now has a second edition (August 2023). His second book, *On Becoming a Healer: The Journey from Patient Care to Caring About Your Patients,* was published by Johns Hopkins University Press. Dr. Weiner is a graduate of Geisel School of Medicine at Dartmouth, from which he received the 2024 Distinguished Alumni Award. He completed his residency at the University of Chicago and is a former Robert Wood Johnson Foundation Generalist Physician Faculty Scholar. He co-hosts the podcast, *On Becoming a Healer*.

EHRM Patient Safety & Human Factors Research Workgroup

Our EHRM Patient Safety & Human Factors Research Workgroup was launched to help investigators develop ideas that result in funded research and evaluation projects related to the EHR transition. The workgroup, led by PROVEN co-investigators Drs. Kristina Cordasco and April Savoy, aims to support researchers by providing feedback on project ideas, connecting them with relevant operations partners, and identifying the resources they need to be successful. VA researchers with specific interests in patient safety or human factors engineering are invited to participate. The workgroup convenes on the 3rd Friday of each month. If you are interested in participating, please email provenhub@va.gov with your VA location and a few sentences about your area of interest. *Please note that this group is currently open to VA researchers only.*

VA EHRM Research Resources

The PROVEN Project Registry contains current information on EHRM projects.

Access the JGIM special issue "The Science of Electronic Health Record Transitions"

The EHRM-IO Intranet web page provides updates on the <u>deployment schedule</u> when they become available.

Access VIReC's VA Millennium EHR Data Documentation & Resources on the Intranet.

VIReC's Summary Documentation Tables include detailed information about data found in the <u>Corporate Data Warehouse</u>. (Intranet site)

VA Millennium EHR Data on the VHA Data Portal contains information about the data available, and how to access data for research, quality improvement, and operations projects. (Intranet site)

<u>EHRM-IO Data Migration and Management team SharePoint site</u> links to resources related to data syndication. (Intranet site)

<u>EHRM & Research SharePoint</u> has research resources related to the Oracle Health EHR implementation. (Intranet site)

Are you conducting an EHRM research or quality improvement project? Let us know at <u>provenhub@va.gov</u>

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