

Fall 2021



CCDOR

Connection

Our Mission

To develop and evaluate interventions and implementation strategies to improve health care delivery, Veteran engagement in health care, and Veterans' health and functioning in their communities

Director: Steven Fu, MD, MSCE **Deputy Director:** Nina Sayer, PhD LP

Associate Director: Brent Taylor, PhD

CCDOR Highlights

- **Hildi Hagedorn** earned the [HSR&D Health System Impact Award](#) for her work to increase the implementation of evidence-based treatments for Veterans with substance use disorders.
- **Anne Melzer** and **Timothy Wilt** had an editorial on lung cancer screening published in JAMA Network Open and featured on CNN.
- **Agnes Jensen** was a recipient of the 2021 Civil Servant of the Year award which recognizes select individuals from all Federal agencies in Minnesota for their superior performance and dedicated Federal service.
- **Orly Vardeny** and her team published their [paper](#) on the effectiveness of higher influenza vaccine dose on all-cause death and hospitalization among patients with cardiovascular disease in JAMA.
- **Michele Spont** was invited to assist the VA Office of Mental Health and Suicide Prevention (OMHSP) with co-authoring the VA response to a Congressional Tracking Report regarding cultural competence training for VA mental health providers, whether minority Veterans receive quality and culturally appropriate mental health care, and recommendations on how to address the unique mental health needs of minority veterans and any disparities in care they receive.
- **Erin Krebs** was invited to serve on the Scientific Advisory Council established by FORE (Foundation for Opioid Response Efforts) that will provide guidance to advance initiatives addressing the nationwide opioid crisis.
- **Allison Gustavson** was awarded the Dorothy Briggs Memorial Scientific Inquiry Award which recognizes authors whose work have made measurable contribution to the knowledge base of physical therapy.
- CCDOR alumni have been featured in the media for their impactful work. **Rachel Hardeman** and the University of Minnesota received a \$5 million donation from Blue Cross and Blue Shield of Minnesota to fund the [Center for Antiracism Research for Health Equity](#) which is committed to ending the impact of structural racism on health and healthcare. **Melvin Donaldson** was featured on Iowa Public Radio about his experience as an emergency physician during the pandemic. You can read more [here](#).



Hildi Hagedorn, PhD
(Credit: April Eilers—
Minneapolis VA Public
Affairs)

In this Issue

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Calendar

Implementation Science Journal
Club—4th Tuesday of every month

Medicine Grand Rounds

Erin Krebs—Oct 8
Wendy Miller—Nov 5
Timothy Wilt—Nov 12
Howard Fink—Dec 10
Susan Diem—Mar 4
Kris Ensrud—Apr 1
Elizabeth Goldsmith—May 6
Elisheva Danan—Jun 3

Medicine Journal Club

Anne Melzer—Sep 30
Elizabeth Goldsmith—Oct 7
Allison Gustavson—Oct 28
Kris Ensrud—Nov 4
Dmitri Drekonja—Nov 18
Wendy Miller—Dec 2
Elisheva Danan—Jan 6
Maureen Murdoch—Feb 3
Timothy Wilt—Mar 3
Nina Sayer—Mar 17
Steven Fu—Apr 7
Orly Vardeny Ni—May 5
Wei (Denise) Duan-Porter—Jun 2
Ariane Baldomero—Jun 23

CCDOR Research Conference

Anne Melzer—Oct 14
Veterans Day—Nov 11
Melissa Polusny—Dec 9

COACH: COUPLES FACING PTSD TOGETHER

Therapies for PTSD have been criticized for a narrow focus on symptom gains over goals that may be more meaningful to veterans, such as greater quality of life, complete EBPs when loved ones encouraged them to interpersonal connections, and social functioning. For Project HomeFront, **Dr. Laura Meis** and her team surveyed 598 Veterans initiating EBPs for PTSD and a family member across four VA medical centers and found that Veterans were more than twice as likely to confront distress and that veterans experienced greater treatment gains when they shared more with their loved ones about their treatment. A couples-based, exposure



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COACH: COUPLES FACING PTSD TOGETHER cont'd

therapy for PTSD that integrates intimate partners into every session of PE could provide the opportunity to mobilize the whole household in the service of EBP engagement, while extending the goals of therapy beyond symptom reduction to family functioning. COACH aims to improve the degree to which PTSD treatment influences these patient-centered outcomes. Specifically, Dr. Meis and her team will complete stages 1A and 1B of the Stage Model of Treatment Development: 1) expand the treatment outline using content experts and feedback from key stakeholders (Veterans, intimate partners, providers, and VA mental health leadership); 2) conduct a pilot open trial to assess a) acceptability of treatment components, structure, and materials, b) feasibility of the

intervention (retention and intervention fidelity), and c) study approach (screening, recruitment, and assessment process); and 3) explore the preliminary effects of the intervention on select outcomes including overall functioning, mental health functioning, social functioning, family functioning, and potential mechanisms (social control, subjective norms, and the degree to which veterans rely on their partners for support). COACH could serve as a first step in a series of studies that feed the evolution of one-on-one, symptom-focused PTSD therapies into family-based interventions designed to lift the whole household, contributing to a broader evolution towards evidence-based, family-inclusive care focused on outcomes with meaning to Veterans.

CCDOR Fellow & Investigators Awarded Career Development Grants

Dr. Allison Gustavson, physical therapist and CCDOR Fellow, was recently awarded funding through the University of Minnesota's Learning Health System Mentored Career Development Program (MN-LHS) which is a K12 scholar training program that trains embedded researchers to systematically generate, apply, and translate evidence quickly within health systems to improve personalization, quality, equity, and outcomes of care and reduce waste in the health care system. The MN-LHS will support her study titled, "Implementing Telehealth to Enhance Access to Quality Rehabilitation Following a Hospitalization for Veterans with Cognitive Impairment," which is expected to begin October 2021.

Veterans are a growing population at greater risk for dementia due to their military experience and exposures, thus placing increased demand on VHA to provide high quality care. The provision of high-quality care is complicated by this population's greater risk for hospitalization and complex care transitions. Timely access to physical therapy addresses hospital-induced declines in function that threaten a Veteran's ability to remain in his or her own home. For some, delivering this care at home vs. the standard practice of discharge to a nursing home for physical therapy, can minimize disruption to the environment and caregiver network of a person with dementia.

In a pilot study with co-mentor Dr. Jennifer Stevens-Lapsley that was designed to qualitatively explore Veter-

an and family caregiver perspectives of telerehabilitation, 14 Veterans receiving care through the VHA were interviewed. Dr. Gustavson and the team found that older Veterans were open to using telerehabilitation with caregiver assistance and believed it is a method to engage socially and reach their full functional potential. The proposed K12 study will establish foundational evidence for home-based models of care for persons with dementia adapted for telerehabilitation following hospitalization. Specifically, Dr. Gustavson and her team aim to systematically adapt an exercise model of care for persons with dementia to telerehabilitation for persons with dementia following hospitalization through developmental evaluation (Aim1), pilot testing (Aim 2) and stakeholder engagement (Aim 3). Aim 1 will be a developmental evaluation via qualitative interviews (N=30) across impacted groups. Aim 2 pilots the model on 10 Veterans with dementia following hospitalization to evaluate feasibility, acceptability, and preliminary effectiveness in improving physical function. Aim 3 will use three stakeholder panels (Veterans/caregivers, providers, health system leaders) to identify future implementation strategies.

Dr. Gustavson also worked closely with advisor and CCDOR investigator, Dr. Laura Meis, on a Community Engagement Studio of Veterans to gain input on the proposed K12 including how to refine recruitment strategies for the pilot. Veterans were collectively enthusiastic

CCDOR Fellow & Investigators Awarded CD Grants cont'd

about the proposed project and saw it as an important area of research that would reach rural Veterans and allow fellow Veterans to recover at home following a hospitalization. As with the qualitative results, the Veteran from the Studio highlighted the importance of involving the caregiver which the study will do. Study results will inform next steps including an implementation manual, factors related to sustainability, and ongoing stakeholder engagement efforts during the next implementation/effectiveness trial of the adapted telerehabilitation model.

Dr. Elisheva Danan, general internist and CCDOR investigator, was also awarded an MN-LHS K12. Her K12 is titled, "Patient-centered primary and preventive healthcare for female Veterans who have experienced sexual trauma." Sexual assault affects 1 in 3 U.S. women and has lifelong consequences for women's health that can include a more than two-fold cervical cancer risk. Pap testing dramatically decreases cervical cancer rates, but women who have experienced sexual assault face barriers to testing. A quarter of women in the VA report military sexual trauma, which may affect their care. A promising new approach to cervical cancer screening would use a self-collected vaginal swab in place of a pelvic exam. This research is the groundwork for implementing self-collected testing as a patient-centered option in VA.

LHS research is patient-engaged and strives to create sustainable improvements in healthcare delivery. Dr. Danan is conducting three studies to better understand women's experiences with cervical cancer screening in VA and perspectives on self-collected testing. Study 1 combines responses to a multisite survey of women Veterans across 12 VAs in 9 states with medical record data to evaluate Pap test completion. Study 2 is a retrospective cohort of a nationally representative sample of women Veterans that will describe concordance with cervical cancer screening guidelines in VA. Study 3 involves qualitative interviews with patients and health system stakeholders at the Minneapolis VA.

Dr. Danan and her team have found that nearly 60% of women Veterans who use VA care have experienced sexual assault in their lifetimes, and that women who have been assaulted were more than twice as likely as other women to report high anxiety, distress, and dis-

comfort with gynecologic exams. They were also twice as likely to report delaying a gynecologic exam due to distress. Ongoing work will help the team to develop a pilot study for self-collected cervical cancer screening in VA and eventually improve women Veterans' screening experiences in VA.

Dr. Arianne Baldomero is a staff pulmonologist and CCDOR affiliate. She was awarded support through the University of Minnesota Clinical and Translational Science Institute (CTSI) KL2 Scholars Career Development Program which is available to Assistant Professors conducting clinical or translational research.

Dr. Baldomero's KL2, "Disparities in Rural vs. Urban Chronic Obstructive Pulmonary Disease (COPD) Management," aims to identify the underlying reasons for disparities in COPD management among patients receiving care in rural vs. urban settings. COPD, the 4th leading cause of death in the U.S., disproportionately affects rural communities. Rural counties have higher COPD prevalence (8.2% vs. 4.7%) and more COPD-related hospitalizations (14 vs. 11 per 1,000) and deaths (55 vs. 32 per 100,000) than urban counties. Veterans represent an important population since they are twice as likely to suffer from COPD compared to the general U.S. population and >30% of all veterans who rely on the Department of Veterans Affairs (VA) for health care reside in rural areas. Although studies have identified rural disparities in COPD outcomes, specifically hospitalizations and mortality, the *reasons* for poor outcomes represent a critical knowledge gap that must be filled in order to improve these outcomes.

The team will compare COPD management among rural and urban veterans using the VA electronic health record (EHR). They will also assess institutional barriers to implementation of evidence-based COPD management among rural veterans to inform development of future interventions to improve rural COPD outcomes. The team is currently analyzing the quantitative data and have begun conducting provider interviews. Preliminary quantitative results suggest drive times to care, specifically drive time to closest specialty care clinic, independently impacts health care services delivery among veterans with COPD who reside not only in rural areas, but also those who reside in urban areas.



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EPOCH Study—5 Years Later

Evaluating Prescription Opioid Changes in Veterans (EPOCH) is a national longitudinal prospective cohort study funded by VA HSR&D (IIR 14-295, IIR 19-083; PI **Erin Krebs**). The main objective of EPOCH is to understand effects of changes in opioid prescribing practice (especially opioid dose reduction and discontinuation) on Veterans treated with opioid therapy for chronic pain.

The first EPOCH survey was launched in 2016, shortly before Centers for Disease Control and Prevention (CDC) and VA/Department of Defense changed opioid prescribing guidelines, prompting clinicians to initiate opioid tapering to lower doses or discontinuation for patients on long-term opioid therapy.

EPOCH survey cohort participants are a nationally representative sample of VA patients treated with prescribed opioid analgesics for at least 6 months prior to a 2016 invitation date. A two-stage stratified sampling design was used to identify a representative sample of patients who were invited to participate in a mixed-mode (mail and telephone) survey with annual follow-up. Of 14,160 patients originally invited, 9253 (65.3%) completed a baseline questionnaire and were enrolled as participants in the survey cohort. Follow-up response rates have remained fairly strong over time: 7429 (81.9% of eligible) participants at year 1, 6632 (76.7% of eligible) partici-

pants at year 2, and 5471 (75.1% of eligible) participants at year 3. Currently, we are cleaning 4-year follow-up survey data and midway through data collection for the 5-year follow-up survey wave.

In 2019, the EPOCH research team expanded to include a Veteran Engagement Panel (VEP) of 8 Veterans who have personal experience with chronic pain. The VEP has contributed to development and refinement of follow-up survey questions and development of a supplemental research proposal examining COVID-19 effects on participants. The VEP also collaborated on a research progress update newsletter, which is being mailed to participants prior to the 5-year survey wave.

EPOCH has served as a resource for research trainees and cross-COIN collaboration. For example, Dr. Elizabeth Goldsmith (current CCDOR investigator, former HSR&D fellow) used EPOCH data for her epidemiology dissertation and for a published fellowship project. Dr. Joseph Frank (Denver COIN investigator) embedded an additional telephone survey of experiences related to opioid tapering between the year 1 & 2 follow-up surveys for his HSR&D CDA-2. In coming years, the team anticipates multiple research products and additional collaborations with investigators, especially trainees and fellows, interested in analyzing this rich dataset.

Minneapolis VA Evidence-Synthesis Program

Drs. Timothy Wilt and Wei (Denise) Duan-Porter have led the **Minneapolis VA ESP Program** through another productive year. The team has led several reviews that have led to publications or are in progress. The reviews covered critical topics including impacts from the COVID-19 pandemic and suicide prevention.

- Risk and Protective Factors Across Socioecological Levels of Risk for Suicide (Ullman et al., 2020)
- COVID-19: Intensive Care Unit Length of Stay and Ventilation Days (Rapid Response; Duan-Porter et al., 2020)
- COVID-19: Remdesivir for Hospitalized Adults—A Living Review (Wilt et al., 2020)
- COVID-19 Post-acute Care Major Organ Damage: A Living Rapid Review (Greer et al., 2020)
- Care Coordination Models and Tools: A Systematic Review and Key Informant Interviews (Duan-Porter W, Ullman K, Majeski B, Miake-Lye I, Diem S, and Wilt TJ. Care Coordination Models and Tools—Systematic Review and Key Informant Interviews. Accepted for publication September 2021. JGIM.
- The Effect of Medical Scribes in Cardiology, Orthopedic and Emergency Departments: A Systematic Review (Ullman, K., McKenzie, L., Bart, B., Park, G., MacDonald, R., Linskens, E., & Wilt, T. J. (2021). The Effect of Medical Scribes in Emergency Departments: A Systematic Review. *The Journal of Emergency Medicine*)
- Evidence Review: Population and Community-Based Interventions to Prevent Suicide (Gustavson AM & Linskens EJ, Sayer NA, Venables N, MacDonald R, McKenzie L, Ullman KE, Wilt TJ, Sultan S. The intersection of implementation science and community-based suicide prevention research: opportunities to advance the field. Accepted for publication April 2021. *Journal of Affective Disorders*)
- Psychotherapies for Chronic Pain (Goldsmith & Koffel et al., in progress)
- Staffing in Nursing Homes (Jutkowitz & Landsteiner et al., in progress)
- Diabetic Foot Risk (Kaka et al., in progress)



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Select CCDOR Publications

- Vardeny O**, Kim K, Udell JA, Joseph J, Desai AS, Farkouh ME, Hegde SM, Hernandez AF, McGeer A, Talbot HK, Anand I. Effect of high-dose trivalent vs standard-dose quadrivalent influenza vaccine on mortality or cardiopulmonary hospitalization in patients with high-risk cardiovascular disease: A randomized clinical trial. *JAMA*. 2021 Jan 5;325(1):39-49.
- Wilt TJ**, Ullman KE, Linskens EJ, MacDonald R, Brasure M, Ester E, Nelson VA, Saha J, Sultan S, Dahm P. Therapies for clinically localized prostate cancer: A comparative effectiveness review. *The Journal of urology*. 2021 Apr;205(4):967-76.
- Gustavson AM**, Linskens EJ, Sayer NA, Murdoch M, Venables N, MacDonald R, McKenzie L, Ullman KE, Wilt TJ, Sultan S. The intersection of implementation science and community-based suicide prevention research: Opportunities to advance the field. *Journal of affective disorders*. 2021 Jul 1;290:237-9.
- Danan ER**, White KM, Wilt TJ, Partin MR. Reactions to recommendations and evidence about prostate cancer screening among White and Black male veterans. *American Journal of Men's Health*. 2021 Jun;15(3):15579883211022110.
- Baldomero AK**, Melzer A, Greer N, Majeski BN, Macdonald R, Wilt TJ. Effectiveness and harms of high-flow nasal oxygen (HFNO) for acute respiratory failure: A systematic review protocol. *BMJ open*. 2020 Feb 1;10(2):e034956.
- Fish J**, Counts PK. Justice for Native People, Justice for Native Me. *Cultural Methods in Psychology: Describing and Transforming Cultures*. 2021 Aug 27.
- Kaka AS, MacDonald R, Greer N, Vela K, Duan-Porter W, Obley A, Wilt TJ. Major update: Remdesivir for adults with COVID-19: A living systematic review and meta-analysis for the American College of Physicians Practice Points. *Annals of internal medicine*. 2021 May;174(5):663-72.
- Sheets KM, Kats AM, Langsetmo L, Mackey D, Fink HA, Diem SJ, Duan-Porter W, Cawthon PM, Schousboe JT, Ensrud KE. Life-space mobility and healthcare costs and utilization in older men. *Journal of the American Geriatrics Society*. 2021 May 7.
- Gustavson AM**, Wisdom JP, Kenny ME, Salameh HA, Ackland PE, Clothier BA, Noorbaloochi S, Gordon AJ, Hagedorn HJ. Early impacts of a multifaceted implementation strategy to increase use of medication treatments for opioid use disorder in the Veterans Health Administration. *Implementation Science Communications*. 2021 2(1):1-13.
- Polusny MA**, Hintz S, Mallen M, Thuras P, Krebs EE, Erbes CR, Arbisi PA. Pre-deployment personality traits predict prescription opioid receipt over 2-year post-deployment period in a longitudinal cohort of deployed National Guard soldiers. *Addictive behaviors*. 2021 Aug 1;119:106919.
- Ullman K**, McKenzie L, Bart B, Park G, MacDonald R, Linskens E, Wilt, TJ (2021). The effect of medical scribes in emergency departments: A systematic review. *Journal of emergency medicine*.
- Duan-Porter W**, Ullman K, Majeski B, Miake-Lye I, Diem S, and Wilt TJ. Care coordination models and tools—Systematic review and key informant interviews. Accepted for publication September 2021. *JGIM*.
- Burgess DJ**, Vallone D, Bair MJ, Matthias MS, Taylor BC, Taylor SL. Shifting the national consciousness about pain treatment: The critical need for a national public education campaign. *The Journal of pain*. 2021 May 1.
- Sayer NA**, Wiltsey, Stirman S, Rosen CS, Bernardy NC, Spont MR, Kehle-Forbes SM, Eftekhari A, Chard KM, Nelson DB. Investigation of Therapist Effects on Patient Engagement in Evidence-Based Psychotherapies for Post-traumatic Stress Disorder in the Veterans Health Administration. *Journal of Traumatic Stress*. 2021 May 28.
- Drekonja DM**, Trautner B, Amundson C, Kuskowski M, Johnson JR. Effect of 7 vs 14 days of antibiotic therapy on resolution of symptoms among afebrile men with urinary tract infection: A randomized clinical trial. *JAMA*. 2021 Jul 27;326(4):324-31.
- Koffel E**, Hagedorn H. Provider perspectives of implementation of an evidence-based insomnia treatment in Veterans Affairs (VA) primary care: Barriers, existing strategies, and future directions. *Implementation science communications*. 2020 Dec;1(1):1-0.
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- DeRonne BM**, Wong KR, Schultz E, Jones E, Krebs EE. Implementation of a pharmacist care manager model to expand availability of medications for opioid use disorder. *American Journal of Health-System Pharmacy*. 2021 Feb 15;78(4):354-9.
- Park YS, Wyman JF, McMorris BJ, Prui-nelli L, Song Y, Kaas MJ, Sherman SE, Fu S. Evaluation of neighborhood resources and mental health in American military veterans using Geographic Information Systems. *Preventive medicine reports*. 2021 Sep 3:101546.
- Mahendra M, Luo Y, Mills H, Schenk G, Butte AJ, Dudley RA. Impact of different approaches to preparing notes for analysis with natural language processing on the performance of prediction models in intensive care. *Critical care explorations*. 2021 Jun;3(6).



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CCDOR was founded in 1998 and is currently comprised of 30 Core Investigators (includes clinically-active physicians, biostatisticians, epidemiologists, behavioral scientists, and clinical psychologists), 8 Affiliate Investigators, 10 fellows, and 100 Research and Administrative Support Staff. It supports over 60 funded studies and several research training programs for post-doctoral level Investigators.

Center of Innovation

In 2013, CCDOR became a VA Center of Innovation (COIN) and was refunded in 2018. The COIN program rewards research innovations and partnerships to ensure that research has the greatest possible impact on VHA policies, healthcare practices, and health outcomes for Veterans. COINs emphasize detailed strategic planning and collaboration in one or more focused areas of research, partnerships with VA clinical and/or operations leaders, and accelerated movement toward implementation and impact.

CCDOR's Research Priorities

- Trauma Recovery
- Chronic Pain and Opioid Harms Reduction

CCDOR's Cores

- Administrative Core
- Evidence Synthesis Core
- Implementation Core
- Mentoring and Training Core
- Statistics and Data Management Core
- Veteran Engagement Core

Operational Partners

- National Center for Health Promotion and Disease Prevention (NCP)
- National Center for PTSD
- Office of Mental Health and Suicide Prevention
- VA Midwest Health Care Network, VISN 23
- VA Primary Care Program Office
- VHA Pain Management (Program Office)

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VA



U.S. Department of Veterans Affairs

Veterans Health Administration