

Fall 2022



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 Directors: Brent Taylor, PhD and Shannon Kehle-Forbes, PhD LP



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CCDOR Highlights

- **Hildi Hagedorn's** ADaPT-OUT study paper in JGIM was selected by the JGIM Quality Improvement Science/ Implementation Science (QIS/IS) Working Group as one of the best QIS/IS articles of the past few years.
- **Orly Vardeny** contributed to the 2022 AHA/ACC/HFSA Guideline for the Management of Heart Failure. This guideline was published in the Journal of American College of Cardiology and the American Heart Association "Circulation" journal.
- **Michele Spont** is a consultant for the NCPTSD's PTSD Mentoring Program to develop processes to address inequity in different aspects of PTSD specialty treatment (started Jan. 2022). In May 2022, she gave a presentation entitled, "Thinking about Inequity in Mental Health Treatment for PTSD: What do we do now?" The first equity consultation to a PTSD Clinical Team is currently underway.
- Several CCDOR investigators initiated new grants in the last year:
 - **Princess Ackland:** VA HSR&D IIR will examine multi-level factors impacting the integration of evidence-based psychotherapies for depression and inform an evidence-based intervention framework.
 - **Adams Dudley:** VA Office of Mental Health and Suicide Prevention funding to develop automated algorithms to identify risk factors for suicide (e.g. access to firearms, substance use) from VA electronic medical records.
 - **Steve Fu:** NIMDH funding to conduct a smoking cessation intervention project as part of the new Center for Chronic Disease Reduction and Equity Promotion Across Minnesota (C2DREAM) which is one of nine initiatives nationwide to receive this funding.
 - **Areef Ishani:** VA CSP will determine if metoprolol succinate (a dialyzable, beta-1 selective beta blocker) improves cardiovascular outcome vs. carvedilol in hemodialysis patients, and which practices best support adoption and sustainability.
 - **Melissa Polusny:** Minneapolis VA was a site for the VA ORD DEI Summer Research Program which introduced Veteran and military-connected students to mental health research and the possibility of future careers in VA.
 - **Nina Sayer:** VA HSR&D SDR to describe the health and functional outcomes of suicide exposure among post-9/11 Veterans transitioning to civilian life.
- **Jillian Fish** won top prize at 2022 Frank Conference (\$10,000 Research Prize awarded annually by the University of Florida Center for Public Interest Communications) for her research on Narratives for Native People.
- **Adrienne Baldomero** received the 2021-2022 Outstanding Educator in Specialty Medicine award from the Minneapolis VA.
- CCDOR alumni continue their success. **Kathleen Carlson** was awarded the Oregon Health and Science University Faculty Excellence and Innovation Award for her innovative research on [gun violence prevention](#).



Hildi Hagedorn, PhD
(Credit: Keith Langsdorf —
Minneapolis VA Public
Affairs)

In this Issue

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Calendar

Implementation Science Journal
Club—4th Tuesday of every month

Medicine Grand Rounds

Timothy Wilt—Dec 9

Elizabeth Goldsmith—Feb 3

Elisheva Danan—Mar 3

Susan Diem—Mar 31

Howard Fink—Jun 2

Medicine Journal Club

Kris Ensrud—Dec 1

Elisheva Danan—Jan 5

Brent Taylor—Feb 2

Diana Burgess—Mar 2

Hildi Hagedorn—Mar 16

Timothy Wilt—Apr 6

Wendy Miller—May 4

Elizabeth Goldsmith—Jun 1



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Suicide Prevention Work Within CCDOR

Suicide is among the leading causes of premature deaths. In 2018, Veterans accounted for 14% the 48,344 suicides that year. Suicide prevention is a critical priority nationwide. Within CCDOR, investigators and staff have joined the national community to tackle this public health problem head-on through research and dissemination.

Dr. Shahnaz Sultan led a **Minneapolis VA Evidence-Synthesis Program (ESP)** systematic review of the effectiveness and harms of community-based or population-level strategies to prevent suicide. The review addressed two main questions: 1) What are the effects of population and community-based prevention interventions on suicide attempts and suicide deaths and 2) What are the potential unintended consequences of these interventions? They found that select community-based interventions may reduce suicides. These are interventions that reduce access to lethal means, implement organizational policies in workplace settings, and screen for depression in the community. Authors note that the existing literature was challenging to synthesize for several reasons including the variability in reporting of suicide outcome and details of the intervention. The results of this review were published in [Crisis: The Journal of Crisis Intervention and Suicide Prevention](#) this year.

Variability in reporting risk factors led **Dr. Adams Dudley** to partner with the Office of Mental Health and Suicide Prevention (OMHSP) to develop natural language processing (NLP) algorithms to find some life events (e.g., homelessness) in notes, but has not yet addressed social or family conflict or employment instability or which patients have access to lethal means. Existing scientific ontologies do not capture many of the plain language ways patients talk about and providers record life events. Similarly, there is no ontology for plain English terms for lethal means. We will create these ontologies. As a result, Dr. Dudley's VA HSR&D SDR, "Using Artificial Intelligence to Predict Suicide," aims to develop terminologies and ontologies of conflict within social or family relationships, employment instability, and access to lethal means that facilitate automated extraction of these concepts from clinical notes; determine the frequency of mention of conflict within social or family relationships, employment instability, and access to lethal means in the

last six months of life of suicide decedents and controls; and assess the contribution of risk factors mentioned in clinical text to the predictive power of rapidly implementable algorithms estimating suicide risk. Dr. Dudley and his team are also working closely with REACH VET, a VA initiative to identify Veterans who may clinically benefit from enhanced care, outreach and risk assessment and supplement current clinical strategies to identify at-risk Veterans.

Dr. Nina Sayer, CCDOR Deputy Director, has initiated her VA HSR&D Service-Directed Research (SDR) project titled, "Exposure to Suicide Among Post 9/11 Veterans: Prevalence, Correlates and Treatment Needs." This explanatory sequential mixed-methods study will provide foundational information on an understudied risk factor for suicide in a cohort of Veterans at increased suicide risk – post 9/11 Veterans within six years following military separation. It will provide information to inform suicide postvention strategies that target the population of suicide bereaved post-9/11 Veterans as well as those targeting women and American Indian/Alaskan Native (AI/AN) Veterans. Specifically, the study aims to 1) evaluate differences in the prevalence of posttraumatic stress disorder (PTSD), prolonged grief disorder (PGD), and in suicidal ideation, attempts and planning among Veterans exposed to suicide compared with those exposed to other causes of sudden death and with unexposed Veterans. The study will also evaluate differences by sex and race; 2) identify modifiable moderating factors for the association between suicide exposure and negative outcomes and modifiable moderating factors for the association between suicide or sudden death exposure and negative outcomes relative to those with neither exposure; 3) describe treatment experiences, interests, reported suicide attempts, and patterns of VA service utilization among those exposed to a suicide death compared to Veterans exposed to other sudden deaths and to unexposed Veterans; and 4) contextualize quantitative findings through interviews with a purposive sample of Veterans exposed to suicide. The interviews will focus on modifiable factors at each level of the socio-ecological model of suicide prevention to better understand targets for intervention.

Broadening the Path of Diversity, Equity and Inclusion

To enhance CCDOR's community with respect to its employees and working environment, CCDOR began three DEI workgroups this summer. Each group has established leadership, membership, and 2022-2023 goals.

Mariah Branson and Alexandra Gowdy-Jaehnig co-lead the **Diversity Workgroup**, and members include Rebecca Brown, Collin Calvert, Adams Dudley, Steve Fu, Sierra Hennessy, Adam Kaplan and Sarah Norman. The Workgroup's overall objective is to continue and expand CCDOR's efforts to recruit and retain staff, investigators, fellows, and Without Compensation (WOC) staff from diverse backgrounds. The Workgroup has four goals: 1) develop CCDOR's diversity, equity, and inclusion statement, 2) develop a plan for CCDOR to recruit and hire more diverse job candidates, 3) identify and provide diversity educational opportunities and resources for CCDOR employees, and 4) ensure CCDOR effectively communicates and broadly disseminates its commitment to diversity. To date, the Diversity Workgroup has engaged CCDOR stakeholders in the creation of a DEI statement (which is now available for the Center's use) and has started a literature review to identify strategies to recruit and hire more diverse job candidates. CCDOR's DEI statement reads:

The Center for Care Delivery and Outcomes Research (CCDOR) strives to foster an inclusive work environment that honors its employees' diverse identities, perspectives, backgrounds, values, and cultural practices. We believe that a diverse workforce enriches our research teams and the quality of our research to improve health and healthcare delivery for all. CCDOR is deeply committed to just treatment, equitable opportunity, and cultivating a community based on respect for everyone.

The **Equity Workgroup** is co-led by Tam Do and Lizzy Goldsmith. Members include Maylen Anthony, Patrick Hammett, Erin Linden, Brittany Majeski, Brent Taylor, and Timothy Wilt. Last December, CCDOR conducted a needs assessment that covered several areas including DEI. CCDOR employees expressed a need for more equitable opportunities specifically for project staff. As such, the Equity Workgroup's overall objective is to improve equity for CCDOR project staff (research assistants, study coordinators, and project managers) through transparency and shared knowledge. To move CCDOR toward this objective, the Workgroup's goals for the next

year are to educate CCDOR on career development pathways for project staff by 1) developing communication guides for VA-funded staff and PIs regarding personalized career development for staff, and 2) exploring CCDOR mentoring options for project staff based on personalized career development plans. Communication guides are currently under development—with the goal of having final guides in Spring 2023. The mentoring program exploration is planned for 2023.

Tracy Sides and Alex Thompson co-lead the **Inclusion Workgroup**. Members include Erin Amundson, Mallore Argust, Allison Gustavson, Jill Mahal-Lichty, Wendy Miller, and Siamak Noorbaloochi. The Workgroup's goal is to co-design and implement processes and actions to increase community, given the "new normal" hybrid workplace environment. After building a common base of knowledge and soliciting input on workplace values from across CCDOR, the Inclusion Workgroup has begun planning and launching multiple activities, including: developing a "buddy system" for new employees and fellows; hosting a variety of virtual and in-person, drop-in social activities – walk breaks, lunches, coffee breaks; and launching a lightly moderated MS Teams @ CCDOR Community channel to create a virtual 'common space' in CCDOR's work environment that supports informal communication and connections across the center. The Teams channel is in 'soft launch' through Thanksgiving with the goal of a Center-wide launch in early December.

CCDORians have also helped to spread DEI efforts beyond VA. **Dr. Shahnaz Sultan** was named the Vice Chair of the newly-created DEI Council in the Department of Medicine at the University of Minnesota. Along with Associate Vice Chair Dr. Cuong Pham, Dr. Sultan is helping to lead the charge to build community and promote DEI-related work within the Department of Medicine. Faculty and staff from each of the Divisions have been selected to serve on the Council. Drs. Sultan and Pham (along with collaborators from other departments) recently receiving funding from the Office of DEI to better understand how DEI is valued in the promotion and tenure process. Initial work has focused on a systematic review of the published literature to identify modifications to the Promotion and Tenure criteria as well as a review of statements from a range of medical institutions to identify best practices or innovations.



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 covering critical topics including COVID-19 pandemic and long-term care. These and past reviews have led to publications and additional manuscripts in-progress in the past year.

Completed reports included:

- Evidence Compendium: Long-term Effects of SARS-CoV-2 Infection (COVID-19) on Functional Health Status and Health-related Quality of Life in Community-dwelling Adults
- Implementation of Psychotherapies and Mindfulness-based Stress Reduction for Chronic Pain and Chronic Mental Health Conditions
- Effects of Nurse Staffing on Processes of Care and Resident Outcomes in Nursing Homes: A Systematic Review
- Prognostic Tools and Interventions to Prevent and Treat Diabetic Foot Ulcers: A Review of Reviews

Associated publications in the last year included:

- Greer N, Bart B, Billington CJ, Diem SJ, Ensrud KE, Kaka A, Klein M, Melzer AC, Reule S, Shaukat A, Sheets K, Starks J, Vardeny O, McKenzie L, Stroebel B, MacDonald R, Sowerby K, Duan-Porter W, Wilt TJ. (2022). COVID-19 postacute care major organ damage: A sys-

tematic review. *BMJ Open*, 12(8):e061245. doi: 10.1136/bmjopen-2022-061245.

- Linskens EJ, Venables NC, Gustavson AM, Sayer NA, Murdoch M., MacDonald R, & Sultan S. (2022). Population- and community-based interventions to prevent suicide: A systematic review. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*.
- Duan-Porter, W., Ullman, K., Majeski, B., Miake-Lye, I., Diem, S., & Wilt, T. J. (2021). Care coordination models and tools—Systematic review and key informant interviews. *Journal of General Internal Medicine*, 1-13.

The ESP team is also working on the following reports:

- Evidence Brief: Employment, Education, and Continuing Care Outcomes Among Individuals Following COVID-19
- Neuroimaging and Neurophysiologic Biomarkers for Mental Health: An Evidence Map
- Hypofractionation Radiation Therapy for Definitive Treatment of Selected Cancers: A Comparative Effectiveness review
- Non-Surgical Therapies versus Surgery for Early-Stage Non-Small Cell Lung Cancer

Publication Highlights

- Hagedorn HJ, Gustavson AM, Ackland PE, Bangerter A, Bounthavong M, Clothier B, Harris AHS, Kenny ME, Noorbaloochi S, Salameh HA, Gordon AJ.** (2021). Advancing pharmacological treatments for opioid use disorder (ADaPT-ODU): An implementation trial in eight Veterans Health Administration facilities. *Journal of General Internal Medicine* doi:10.1007/s11606-021-07274-7
- Burgess DJ, Bair MJ, Matthias MS, Taylor BC, Vallone D, Taylor SL.** (2021). Shifting the National Consciousness about Pain Treatment: The Critical Need for a National Public Education Campaign. *Journal of Pain* 22, 1129-1133. doi:10.1016/j.jpain.2021.03.156
- Baldomero AK, Kunisaki KM, Wendt CH, Bangerter A, Nelson D, Hagedorn H, Wendt CH, Dudley RA.** (2022). Beyond Access: Factors Associated with Spirometry Underutilization Among Patients With a Diagnosis of COPD in Urban Tertiary Care Centers. *Chronic Obstructive Pulmonary Diseases*. doi:10.15326/jcopdf.2022.0303
- Ensrud KE, Lui LY, Crandall CJ, Orwoll ES, Langsetmo L, Schousboe JT, Fink HA, Lane NE, Kado DM, Cauley JA, Stefanick ML, Cawthon PM.** (2022). Repeat Bone Mineral Density Screening Measurement and Fracture Prediction in Older Men: A Prospective Cohort Study. *The Journal of Clinical Endocrinology and Metabolism*, 107(9):e3877-e3886.
- Linskens EJ, Venables NC, **Gustavson AM, Sayer NA, Murdoch M, MacDonald R, Ullman KE, McKenzie LG, Wilt TJ, Sultan S.** (2022). Population- and community-based interventions to prevent suicide: A systematic review. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*.
- Vardeny O.** (2022). Influenza vaccine in cardiovascular disease: Time to move the needle. *European Heart Journal*.
- Kehle-Forbes SM, Ackland PE, Spont MR, Meis LA, Orazem RJ, Lyon A, Valenstein-Mah HR, Schnurr PP, Zickmund SL, Foa EB, Chard KM.** (2022). Divergent experiences of US veterans who did and did not complete trauma-focused therapies for PTSD: A national qualitative study of treatment dropout. *Behaviour Research and Therapy*. 104123.
- Danan ER, Brunner J, Bergman A, Spont M, Chanfreau C, Canelo I, Krebs EE, Yano EM.** (2022). The Relationship Between Sexual Assault History and Cervical Cancer Screening Completion Among Women Veterans in the Veterans Health Administration. *Journal of Women's Health*.
- Hammett PJ, Eliacin J, Makris UE, Allen KD, Kerns RD, Heapy A, Elizabeth GS, Meis LA, Taylor BC, Saenger M, Cross LJ.** (2022). An Analysis of the Role of Mental Health in a Randomized Trial of a Walking Intervention for Black Veterans with Chronic Pain. *The Journal of Pain*.
- Duan-Porter W, Ullman K, Majeski B, Miake-Lye I, Diem S, Wilt TJ.** Care Coordination Models and Tools—Systematic Review and Key Informant Interviews. *Journal of General Internal Medicine*. 2021 Oct 26:1-3.
- Gustavson AM, Eaton TL, Schapira RM, Iwashyna TJ, Adly M, Purnell A.** Approaches to long COVID care: The Veterans Health Administration experience in 2021. *BMJ Military Health*. 2022 Jul 1.
- Jensen AC, Amundson EC, Brown C, Cochrane J, Daly D, Glenn R, Hope K, Hawkins J, Oakley JW, Sacra E, Walker J.** “Not all groups come together, but this one just clicks”: Ten Tips for Sustaining an Engagement Panel. *Journal of General Internal Medicine*. 2022 Apr;37(1):80-2.
- Melzer AC, Triplette M.** Screening high risk populations for lung cancer. *BMJ (Clinical Research Ed.)*. 2022 Mar 30; 376:o666.
- Meis LA, Polusny MA, Kehle-Forbes SM, Erbes CR, O'Dougherty M, Erickson EP, Orazem RJ, Burmeister LB, Spont MR.** (2022). Making sense of poor adherence in PTSD treatment from the perspectives of veterans and their therapists. *Psychological Trauma: Theory, Research, Practice, and Policy*.
- Murdoch M, Clothier BA, Beebe TJ, Bangerter AK, Noorbaloochi S.** Impact of different cover letter content and incentives on non-response bias in a sample of Veterans applying for Department of Veterans Affairs disability benefits: A randomized, 3X2X2 factorial trial. *BMC Medical Research Methodology*. 2022 Dec;22(1):1-3.
- Martin-Wagar CA, Marquardt CA, Liu Y, Arbisi PA, Erbes CR, **Polusny MA.** (2022). Inconsistent Reporting of Adverse Life Events Is Predicted by Current Internalizing Distress Among Military Service Members. *Military Medicine*.
- Rosen CS, Kaplan AN, **Nelson DB, La Bash H, Chard KM, Eftekhari A, Kehle-Forbes S, Stirman SW, Sayer NA.** (2022). Implementation context and burnout among Department of Veterans Affairs psychotherapists prior to and during the COVID-19 pandemic. *Journal of Affective Disorders*.
- Greer N, Bart B, Billington CJ, **Diem SJ, Ensrud KE, Kaka A, Klein M, Melzer AC, Reule S, Shaikat A, Sheets K, Starks J, Vardeny O, McKenzie L, Stroebel B, Macdonald R, Sowerby K, Duan-Porter W, Wilt TJ.** COVID-19 postacute care major organ damage: A systematic review. *BMJ Open*. 2022 Aug 24;12(8):e061245. doi:10.1136/bmjopen-2022-061245.
- Shepherd-Banigan M, Wells SY, Falkovic M, **Ackland PE, Swinkels C, Dedert E, Ruffin R, Van Houtven CH, Calhoun PS, Edelman D, Weidenbacher HJ, Shapiro A, Glynn S.** Adapting a family-involved intervention to increase initiation and completion of evidenced-based psychotherapy for posttraumatic stress disorder. *SSM Mental Health*. 2022 Dec 1; 2.



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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), 11 Affiliate Investigators, 10 fellows, and 80+ Research and Administrative Support Staff. It supports 49 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)

For more information

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VA



U.S. Department of Veterans Affairs

Veterans Health Administration