



Our Mission

**To enhance patient engagement in and
provider use of evidence-based practices
for Veterans with chronic disease**

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

Associate Directors: Melissa Partin, PhD and Brent Taylor, PhD

CCDOR Highlights

- **Kris Ensrud** was inducted into the Association of American Physicians, a prestigious professional organization that strives to advance scientific and practical medicine!
- **Frank Lederle** is the 2017 John B. Barnwell Award recipient—VA’s highest honor for outstanding achievement in clinical research!
- **Tim Wilt** was inducted into the UMN Medical School Wall of Scholarship! It recognizes investigators whose publication has been cited over 1,000 times by two or three academic citation indices!
- **Shannon Kehle-Forbes** was Guest Editor, along with Rachel Kimerling (VA Palo Alto), for the July National Center for PTSD *PTSD Research Quarterly* focused on patient engagement in evidence-based treatments for PTSD. In their overview, they discuss the state of the evidence regarding factors impacting PTSD treatment engagement and interventions that target engagement and outline critical gaps in the area. Available at <https://www.ptsd.va.gov/professional/newsletters/research-quarterly/V28N3.pdf>.
- VA is making a push to tackle hunger amongst Veterans and has launched a new food insecurity screening question, thanks in part to the work of **Rachel Widome**, CCDOR affiliate investigator. Details highlighted in the October 9 *Washington Post* https://www.washingtonpost.com/news/work/wp/2017/10/09/why-so-many-veterans-go-hungry-and-the-vas-new-plan-to-fix-it/?utm_term=.3f455c0de19e.
- Several CCDOR investigators have received new grant funding: **Howard Fink and the Evidence-Based Practice Center** (AHRQ: “Appropriate Use of Pharmacologic Therapies for Osteoporosis Fracture Prevention”); **Shannon Kehle-Forbes** (RR&D Spire: “Pilot Test of a Self-Management Program for Completers of Trauma-Focused Therapy”); **Erin Koffel** (HSR&D CDA: “Improving Pain and Sleep Outcomes for Veterans with Chronic Pain”); **Melissa Polusny and Chris Erbes** (NCCIH UG3/UH3: “Advancing Research on Mechanisms of Resilience (ARMOR): Prospective Longitudinal Adaptation in New Military Recruits”); and **Nina Sayer** (HSR&D CREATE Supplement: “Promoting Effective, Routine and Sustained Implementation of Stress Treatments 2.0”).



Dr. Ensrud with her father, E. Richard Ensrud, MD, a WWII Veteran (photo: April Eilers)

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Calendar

Visiting Scholar: Jennifer Wisdom, PhD, MPH—Oct 16

CCDOR Steering Committee Meeting—Oct 18

Medicine Journal Club—1st Thursday monthly

Veterans Day—Nov 11

Thanksgiving Day—Nov 23

CCDOR Research Receives National Recognition

Dr. **Tim Wilt** and colleagues completed the follow-up to their critical and highly-publicized study in prostate cancer research, “Prostate Cancer Intervention Versus Observation Trial (PIVOT)”, a randomized controlled trial funded by VA’s Cooperative Studies Program, National Cancer Institute, and Agency for Healthcare Research and Quality. The purpose of PIVOT is to compare mortality associated with two strategies used to manage clinically localized prostate cancer, radical prostatectomy and observation with noncurative palliative interventions. In the original study which ran from November 1994 to January 2002, 731 men with localized prostate cancer were randomized

to radical prostatectomy or observation. The original follow-up was through January 2010. Dr. Wilt and his team extended the follow-up through August 2014 for the primary outcome (all-cause mortality) and the main secondary outcome (prostate-cancer mortality). The results showed that after 19 1/2 years of follow-up, death occurred in 223 of 364 men (61.3%) assigned to surgery and in 245 of 367 (66.8%) assigned to observation (absolute difference in risk, 5.5 percentage points; 95% confidence interval [CI], -1.5 to 12.4; hazard ratio, 0.84; 95% CI, 0.70 to 1.01; P = 0.06). Death attributed to prostate cancer or treatment occurred in 27 men (7.4%) assigned to surgery and in 42

CCDOR Research Receives National Recognition cont'd

men (11.4%) assigned to observation (absolute difference in risk, 4.0 percentage points; 95% CI, -0.2 to 8.3; hazard ratio, 0.63; 95% CI, 0.39 to 1.02; P = 0.06). Surgery may have been associated with lower all-cause mortality than observation among men with intermediate-risk disease but not among those with low-risk disease or high-risk disease. Dr. Wilt and his team concluded that surgery was not associated with significantly lower all-cause or prostate-cancer mortality than observation. The team is currently working with VA-Epi-CAN (Durham VA) to deliver a report to VACO

identifying the study's impact on VA practice patterns.

The most recent results were published in the July issue of the *New England Journal of Medicine*, and received significant attention. Several media outlets have since featured the study, including *NEJM Journal Watch* (which is a podcast of high impact *NEJM* papers), *US News and World Report*, *Star Tribune*, *Minnesota Public Radio*, and *Minnesota Physician* for "Significant Research in 2017 by Minnesota Physicians."

New in CCDOR Research

PE²

Dr. Laura Meis's VA HSR&D study, "Improving Veteran Adherence to Prolonged Exposure for PTSD through Partnering with Families (PE²)," had its 3-day preparation and training summit September 19-21. Adherence to evidence-based psychotherapies (EBPs) for PTSD has been identified as a top priority nationally and internationally. Thus, the objective of PE² is to evaluate the effectiveness of family support as a tool to improve Veteran adherence to these treatments. Specifically, this practical clinical trial which will employ an effectiveness-implementation Hybrid 1 design, aims to: increase Veterans' adherence to PE and improve the clinical outcomes of Veterans receiving PE delivered in routine VA care through engaging families in care, examine barriers/facilitators of implementing family support for PE, and identify mechanisms underlying adherence differences between treatment conditions. It is expected that reducing rates of EBP dropout will positively impact Veterans' health and well-being, lower the cost of treating PTSD, and decrease long-term demand for PTSD services. Furthermore, if demonstrated to be effective, family involvement in care could provide a pathway to resolve repeated calls for regular inclusion of family in PTSD treatment. Once demonstrated for PTSD, these strategies could be considered for other conditions.

The goals of the summit were to reorient the team to the study—covering topics including recruitment, intervention delivery, and data collection processes—and provide in-person PE² training to the study therapists. It brought to-

gether 12 investigators, 12 therapists and 7 study personnel from Ann Arbor, Atlanta, and Minneapolis who will play crucial roles in this multi-site study.

ADaPT-ODU

Dr. Hildi Hagedorn was awarded an HSR&D IIR to investigate the impact of using external facilitation on VA's ongoing implementation efforts to integrate opioid agonist therapy (OAT), an effective treatment for Opioid Use Disorder (OUD) that is strongly recommended by the Uniform Mental Health Services Handbook. Specifically, "Testing a Novel Strategy to Improve Implementation of Medication-Assisted Treatment for Veterans with Opioid Use Disorders in Low-Performing Facilities (ADaPT-ODU)" will test the effectiveness of intensive external facilitation on: a) the proportion of patients with OUD initiating OAT, and b) the proportion who engage in long-term OAT treatment (a minimum of 3 months) at 8 randomly selected low-performing sites compared to the remaining 35 low-performing sites receiving implementation as usual. The study will also conduct a formative evaluation and assess cost and budget impact of external facilitation. With the U.S. in the midst of an opioid misuse and OUD epidemic, VA is committed to supporting efforts to combat this crisis in Veterans. This study stands to bring OAT to the many Veterans with OUD receiving care at facilities with very low prescribing rates. Dr. Hagedorn and her team kicked-off several start-up tasks including reconnecting with VA operational partners about the study, setting up databases, and preparing for qualitative interviews with patients and providers.

New in CCDOR Research cont'd

ARMOR

Drs. Melissa Polusny and Chris Erbes and their team were recently awarded funding through NIH's National Institute of Complementary and Integrative Health (NCCIH) UG3/UH3 Phase Innovation Awards Cooperative Agreement mechanism for their study entitled, "Advancing Research on Mechanisms of Resilience (ARMOR): Prospective Longitudinal Adaptation in New Military Recruits." Basic Combat Training (BCT) is an intense and stressful training period which 20% of National Guard (NG) recruits do not complete. To address this problem, the ARMOR study aims to develop a comprehensive dynamic model of resilience using an integrated, multilevel perspective. New NG enlistees will complete a battery of assessments prior to BCT and at four intervals in the following 24 months of

their service. These assessments are designed to identify predictors of stress and resilience, including neurobiological markers. Ultimately, the team seeks for this knowledge to be used to promote resilience among NG recruits by informing the development of effective stress prevention and treatment strategies.

The ARMOR study comes on the heels of 10 years of resilience research in the Minnesota National Guard by Drs. Polusny and Erbes, including ongoing collaboration with the MN Army National Guard's Recruitment Sustainment Program. Dr. Polusny was a guest on *Minnesota Public Radio* on October 1 to discuss her trajectory of research in this area. *MPR* is broadcasted on 42 stations across the state and has 250,000 listeners. You can hear the full interview at <http://minnesotamilitaryradiohour.com/>.

Minneapolis VA ESP Reports

Dr. Elizabeth Goldsmith (PI) along with **Drs. Maureen Murdoch** and **Brent Taylor** and the Minneapolis team conducted a rapid evidence review on the psychometric properties of selected self-report pain measures to assist in adoption of these measures in clinical trials and other pain research. Seventeen measures that assessed pain severity or intensity or pain-related functional impairment were identified. The primary outcome was the measure's minimally important difference (MID). Amongst the pain measures assessed, three (ODI, RMDQ, and SF-36 BPS) had the most complete psychometric evidence within chronic musculoskeletal pain populations while several of the others had at least some evidence for psychometric reliability, validity, and responsiveness. The team highlighted the need for more cohesion in reporting of definitions, methods, and population descriptions and a framework to support measurement selection. As a follow-up, Dr. Goldsmith participated in the VA SOTA Pain Measurement Outcomes work group meeting in September. Authors were also invited to present at an upcoming Spotlight on Pain Management cyber seminar. Report available at <http://vaww.hsrd.research.va.gov/publications/esp/chronicpain-measures.cfm>.

Dr. Nancy Greer (PI) led a review, "Enhanced Recovery After Surgery (ERAS) Programs for Patients Undergo-

ing Colorectal Surgery." ERAS is a multidisciplinary approach to perioperative care. The defining components of ERAS for colorectal surgery have been revised and new trials have been published. Dr. Greer, **Drs. Shahnaz Sultan** and **Aasma Shaukat** and the Minneapolis ESP team reviewed new RCTs and controlled clinical trials (CCTs) looking at comparative effectiveness and harms overall and by type of surgery, colorectal condition, and fidelity to an enhanced recovery protocol. They found that ERAS significantly reduced length of stay (mean reduction 2.6 days) following colorectal surgery and overall perioperative morbidity (mean absolute reduction 10%) associated with colorectal surgery compared to usual care protocols. However, few of the studies included in the review addressed compliance with the ERAS and only one related compliance to critical outcomes. The review also included barriers and facilitators to ERAS implementation. Report available at <http://vaww.hsrd.research.va.gov/publications/esp/eras.cfm>.

In addition to these reports, the DoD Blast Injury Research Program Coordinating Office highlighted the Minneapolis VA ESP Center's [Blast Injuries Report](#) on their webpage for the month of June. **Dr. Greer** presented this report at a well-attended (150 participants) cyber seminar in July.

Selected CCDOR Publications

- Wilt TJ, Jones KM, Barry MJ, Andriole GL, Culkin D, Wheeler T, Aronson WJ, Brawer MK. Follow-up of prostatectomy versus observations for early prostate cancer. *NEJM*. 2017; 377;2:132-42.
- Hagedorn HJ, Noorbaloochi S, Bangerter A, Stitzer ML, Kivlahan D. Health care cost trajectories in the year prior to and following intake into Veterans Health Administration outpatient substance use disorders treatment. *Journal of Substance Abuse Treatment*. 2017 Aug 1; 79:46-52.
- Kehle-Forbes SM, Harwood EM, Spont M, Sayer NA, Gerould H, Murdoch M. Experiences with VHA care: a qualitative study of U.S. women veterans with self-reported trauma histories. *BMC Women's Health*. 2017 May 30; 17 (1):38.
- Duan-Porter W, Cohen HJ, Demark-Wahnefried W, Sloane R, Pendergast JF, Snyder DC, Morey MC. Physical resilience of older cancer survivors: An emerging concept. *Journal of Geriatric Oncology*. 2016 Nov 1; 7(6):471-478.
- Ensrud KE, Lui LY, Langsetmo L, Vo TN, Taylor BC, Cawthon PM, Kilgore ML, McCulloch CE, Cauley JA, Stefanick ML, Yaffe K, Orwoll ES, Schousboe JT, Osteoporotic Fractures in Men (MrOS) Study Group. Effects of Mobility and Multimorbidity on Inpatient and Post-Acute Health Care Utilization. *The Journals of Gerontology. Series A, Biological Sciences and Medical Sciences*. 2017 Jun 22.
- Polusny MA, Erbes CR, Kramer MD, Thuras P, DeGarmo D, Koffel E, Litz B, Arbisi PA. Resilience and Posttraumatic Stress Disorder Symptoms in National Guard Soldiers Deployed to Iraq: A Prospective Study of Latent Class Trajectories and Their Predictors. *Journal of Traumatic Stress*. 2017 Aug 1.
- Lederle FA. Abdominal Aortic Aneurysm Repair in England and the United States. *The New England Journal of Medicine*. 2017 Mar 9; 376(10):998.
- Sayer NA, Rosen CS, Bernardy NC, Cook JM, Orazem RJ, Chard KM, Mohr DC, Kehle-Forbes SM, Eftekhari A, Crowley J, Ruzek JI, Smith BN, Schnurr PP. Context Matters: Team and Organizational Factors Associated with Reach of Evidence-Based Psychotherapies for PTSD in the Veterans Health Administration. *Administration and Policy in Mental Health*. 2017 Jun 9.
- Koffel E, Vitiello MV, McCurry SM, Rybarczyk B, Von Korff M. Predictors of Adherence to Psychological Treatment for Insomnia and Pain: Analysis from a Randomized Trial. *The Clinical Journal of Pain*. 2017 Sep 14.
- Meyers L, Voller EK, McCallum EB, Thuras P, Shallcross S, Velasquez T, Meis L. Treating Veterans With PTSD and Borderline Personality Symptoms in a 12-Week Intensive Outpatient Setting: Findings From a Pilot Program. *Journal of Traumatic Stress*. 2017 Apr 1; 30(2):178-181.
- Fink HA, Vo TN, Langsetmo L, Barzilay JI, Cauley JA, Schousboe JT, Orwoll ES, Canales MT, Ishani A, Lane NE, Ensrud KE. Association of Increased Urinary Albumin With Risk of Incident Clinical Fracture and Rate of Hip Bone Loss: the Osteoporotic Fractures in Men Study. *Journal of Bone and Mineral Research: The Official Journal of the American Society for Bone and Mineral Research*. 2017 May 1; 32(5):1090-1099.
- Partin MR, Gravely AA, Burgess JF, Haggstrom DA, Lillie SE, Nelson DB, Nugent SM, Shaikat A, Sultan S, Walter LC, Burgess DJ. Contribution of patient, physician, and environmental factors to demographic and health variation in colonoscopy follow-up for abnormal colorectal cancer screening test results. *Cancer*. 2017 Sep 15; 123 (18):3502-3512.
- Spoont M, Nelson D, van Ryn M, Alegria M. Racial and Ethnic Variation in Perceptions of VA Mental Health Providers are Associated With Treatment Retention Among Veterans With PTSD. *Medical Care*. 2017 Sep 1; 55 Suppl 9 Suppl 2:S33-S42.
- Murdoch M, Kehle-Forbes SM, Partin MR. Changes in affect after completing a mailed survey about trauma: two pre and post-test studies in former disability applicants for posttraumatic stress disorder. *BMC Medical Research Methodology*. 2017 May 10; 17 (1):81.
- Sultan S, Malhotra A. Irritable Bowel Syndrome. *Annals of Internal Medicine*. 2017 Jun 6; 166(11):ITC81-ITC96.
- Martinson BC, Mohr DC, Charns MP, Nelson D, Hagedorn HJ, Bangerter A, Bloomfield HE, Owen R, Thrusch CR. Main Outcomes of an RCT to Pilot Test Reporting and Feedback to Foster Research Integrity Climates in the VA. *AJOB Empirical Bioethics*. 2017 Aug 7; 8(3):211-219.
- Ensrud KE, Crandall CJ. Osteoporosis. *Annals of Internal Medicine*. 2017 Aug 1; 167(3):ITC17-ITC32.

Center for Chronic Disease Outcomes Research (CCDOR)

Director: Steven Fu, M.D., M.S.C.E.

CCDOR was founded in 1998 and currently employs 24 core MD and PhD Investigators and over 30 Research and Administrative Support Staff. It supports over 70 funded studies and several research training programs for post-doctoral level Investigators.

In 2013, CCDOR became a VA Center of Innovation (COIN). 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.

Focused Areas of Research

- PTSD
- Cancer prevention and screening (tobacco use, colorectal, prostate)
- Chronic pain
- Evidence synthesis

Partner Offices

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

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