



## Annual Report for Eastern Colorado GRECC, 2019

### Brief History of the Eastern Colorado GRECC:

The Eastern Colorado Geriatric Research, Education and Clinical Center (GRECC) was established October 2014, and funding started February 2015. Located under VISN 19, it is the first new GRECC in 17 years. The primary foci of the center includes gender-related healthcare outcomes in older Veterans (focus on women's health) and treatment and complications of obesity in older Veterans. Secondary themes include intensive rehabilitation programs; palliative care; advance care planning (groups); dissemination and implementation science.

### GRECC Leadership (including the date started in role):

Director	Robert Schwartz , MD	10/1/2014
Associate Director for Research	Wendy Kohrt , PhD	10/1/2014
Associate Director for Education and Evaluation	Kathryn Nearing , PhD	8/19/2018
Acting Associate Director for Clinical	Skotti Church, MD	7/1/2019
Administrative Officer	Colleen Costello, BA/BS	4/1/2018

### GRECC by the Numbers:

#### Accomplishments of GRECC Staff During the FY:

Aging-Related Educational Presentations	96
Career Development Awardees Who Were Mentored	28
Study Sections	14
Editorial Boards	7
Manuscripts Reviewed	148
Publications (articles, books, chapters)	130
Peer-Reviewed Journal Publications	70
Number of Funded Projects	48
Funds for All Funded Projects in FY	\$3,772,763
Funds for Qualified Research in FY (subject to VERA)	\$1,866,901
Funds for Clinical Demonstration Projects	\$179,062
Funds for Education and Training Projects	\$354,050

#### Training Opportunities in GRECC During the FY:

Number of Affiliated Health Trainees Slots	13
Number of Medical Trainees Rotating in GRECC Clinics	4

#### Vacancies:

Number of Vacancies	2
Total FTE of Vacancies	2

**CORE ISSUES:****Challenges with space or facilities:**

The GRECC Department has officially moved into the new BioScience East Building, now called Building P of the RMR-VAMC, effective July 29, 2019. The COIN has successfully moved into the new building as well, along with a Simulation lab for the Education and Training Department. Dr. Michael Harris-Love, who is the new Program Director for Physical Therapy at the University of Colorado Anschutz Medical Campus (AMC) affiliate and a VA GRECC Investigator, has relocated to Denver and will move part of his work to Building P. The GRECC area includes a working exercise facility gym for the clinical Gerofit program, previously located on University campus, and now supports 85 enrolled participants at the new VA Building P facility.

**Any problems recruiting high-quality researchers and clinicians:**

None

**Challenges with adequate space or resources to conduct research:**

Prior to July 29, 2019, the GRECC did not have any office or clinical research space at the RMR VAMC (or at the old facility prior to the move). Because the VA is an affiliate member of the university-based Colorado Clinical and Translational Sciences Institute (CCTSI), all resources supported by the CCTSI can be utilized by VA investigators. These resources include inpatient and outpatient research centers and core laboratories. Therefore, most GRECC research to date has been conducted in CCTSI facilities at the university. New projects will utilize VA space, as appropriate. On July 29, 2019, the GRECC and COIN moved into renovated space in Building P, which is a VA-leased building adjacent to the VA campus. GRECC research space in Building P includes wet bench space for sample processing, three exam rooms, an exercise training facility, a body composition lab, and limited physiological testing space. Because the RMR VAMC has very limited clinical research space (one exam room dedicated to research), the hope is that GRECC research facilities will be operated as a shared resource that other clinical VA investigators can utilize. Resources needed to manage the facility in this manner (e.g., clinic manager, scheduling mechanism) are not yet in place. Two additional barriers will limit the usability of the GRECC research space until they can be resolved: 1) Investigational products managed by the VA pharmacy apparently cannot be stored in Building P. 2) There is no mechanism in place for transporting biospecimens collected in Building P to the hospital lab or bench labs, which is a problem for assays that require fresh samples.

**Vacancies:**

Type of Vacancy: Investigator - non-clinician

FTE of Vacancy: 1                      Start Date: 10/1/2018

Description of the Vacancy: Grant FTE fluctuates, based on 12 approved FTE

Efforts to Fill the Vacancy:

Type of Vacancy: Investigator - clinician

FTE of Vacancy: 1                      Start Date: 10/1/2018

Description of the Vacancy: Grant FTE fluctuates, based on 12 approved FTE

Additional investigator(s)

Efforts to Fill the Vacancy:

## **KEY GRECC CONTRIBUTIONS:**

### **Key GRECC Contributions to Medical Center Programs during FY19:**

#### **Clinical Product**

Audiology Clinical Demonstration Project trains Associated Health Trainees, Geriatric Medicine Fellows and GRECC clinical faculty on audiology best practices while supporting patient referral for hearing health screening. Tinnitus and hearing loss are the two most prevalent disabilities reported among Veterans receiving VA benefits (<https://www.benefits.va.gov/REPORTS/abr/ABR-Compensation-FY16-0613017.pdf>). Hearing loss causes, contributes to, or exacerbates: 1) communication challenges; 2) cognitive decline; 3) social isolation; 4) anger/frustration; and 5) fatigue. The director of the audiology department at the Rocky Mountain Regional VA Medical Facility (RMR-VAMC) and three successive cohorts of GRECC-supported audiology externs have carried out a clinical demonstration project that focuses on providing training in audiology best practices to other Associated Health Trainees, Geriatric Medicine Faculty and Fellows, and GRECC clinical faculty. Our needs assessment identified that health care providers receive little to no education in audiology best practices, despite the high percentage of older Veterans with significant hearing loss. The audiology supervisor and trainees address this gap through a variety of approaches described in detailed in the clinical demonstration project section of this report.

#### **Clinical Product**

Eastern Colorado GRECC Gerofit Program Beats its Enrollment Goal: Gerofit, first developed in 1986 at the VA Medical Center in Durham, NC, is a group-based, supervised exercise program for Veterans over age 65. The Denver-based Gerofit program began July 1, 2018. Veterans meet three times a week for two hours of exercise, which incorporates balance, core coordination and strength training. Local experts lead discussions on topics of interest during monthly Gerofit Learning Opportunities for Wellness (GLOW) classes. Themes include arthritis, older adult vaccines and the effect of exercise on sleep. The program grew to 33 enrolled participants within the first few months and routinely receives 2-3 consults a week. ECHCS Director Sallie Houser-Hanfelter (now retired) said, "I think it's a great way for Veterans to stay active and enjoy the camaraderie that each other's company brings." Dr. Lauren Abbate, a RMR-VAMC emergency department physician and GRECC Associate Director Clinical, serves as the program director. In FY20, Dr. Abbate will present data from an analysis of Gerofit participants indicating that Veterans with arthritis can improve physical function with 3 months of participation in Gerofit at the Gerontological Society of America 2019 annual meeting. She will also capitalize on the networks formed through the Veteran Community Partnership and other engagement efforts described in the next section to expand the Denver-based Gerofit program to rural areas of the state, using a tele-health platform.

#### **Educational Series**

RMR VA Medical Center Nurse Residency Program: In February 2019, Dr. Nearing and Dr. Church met with the director of the nurse residency program to explore ways to partner. To inform these efforts, Dr. Nearing developed a needs assessment, which explored nurse residents' interest in developing skills outlined in the Hartford Institute for Geriatric Nursing competencies. Results highlighted interest in deepening knowledge and skills related to cognitive impairment and urinary incontinence. In response, Dr. Church provided a didactic on "Altered Cognition in the Hospitalized Older Adult," which received an overall average rating of 5.0 (on a 5-point scale) in relation to items evaluating the quality of content and delivery (n= 6). One participant offered the comment, "Very relevant to my patient population. Very informative! Excellent! Thank you." We repeated the needs assessment process with the new cohort of nursing residents in Fall 2019. Going forward, Geriatric-specific core didactics, provided by GRECC faculty, will be integrated into monthly Nurse Educational sessions. Topics will include dementia, delirium, palliative care, caregiver compassion/fatigue, ageism, decision-making capacity, and elder abuse. In addition, GRECC faculty will provide input and feedback on nurse residents' quality improvement projects, as appropriate. Nurse residents may also begin to participate in the interprofessional case conferences and shadowing opportunities available through telehealth clinics.

## **Educational Series**

Access to Care Rounds -- an educational series developed by the Colorado Veteran Community Partnership (VCP): When we first started the Veteran Community Partnership in September 2017, community-based service providers consistently expressed that the VA was a “black box;” mechanisms for connecting Veterans to VA services and resources seemed elusive -- difficult to navigate or engage in a timely manner on behalf of older Veterans. In response, we developed Access to Care Rounds as a one-hour cross-sector panel that discusses specific efforts to link a medically-complex older Veteran to services – both those provided in the community and within the VA. VCP leaders, including VA and community-based organizations, coordinate five Access to Care Rounds events each year. Panels feature service providers from multiple sectors and agencies who share lessons learned stemming from efforts to engage and coordinate a comprehensive array of services for older Veterans experiencing homelessness, suicide ideation, chronic pain, functional limitations and cognitive impairment. After each panel discussion, participants can ask questions and leave with resources to expand the professional networks they can engage to support older adults. Program announcements are shared through the VCP distribution list and partners’ professional networks. Locations alternate between VA and community-based organizations, with virtual access provided, to facilitate inclusive participation and continued partnership development. Access to Care Rounds serve as a forum for sharing strategies to break down silos between organizations and professionals to support older Veterans with complex needs.

## **Key GRECC Contributions to VISN during FY19:**

### **Clinical Product**

GRECC Connect: Eastern Colorado became a GRECC Connect site at the conclusion of FY17. In FY18, we continually expanded our telehealth subspecialty consults and integrated clinical faculty and trainees more fully. In FY19, the GRECC Connect program served 258 veterans, through 161 tele-geriatrics visits, 97 tele-geropsychology visits, and resulted in 48,920 miles saved by providing tele-health visits closer to the veterans’ residence. There were 312 total visits, including 265 CBOC visits and 47 of these visits were through VA Video Connect to the Veteran’s home. Additional metrics include the following:

- Tele geriatrics: 50 new consults, 41 follow up visits
- Tele palliative care: 30 new consults; 8 follow up visits
- Geropsychology: 10 new consults; 15 follow up visits
- 64 Veterans served from rural or highly rural locations.

### **Educational Product**

Rural Interdisciplinary Team Training (RITT): In June 2019, Dr. Hillary Lum, geriatrician, GRECC core faculty and site PI for GRECC Connect, provided the RITT training to 30 rural health care professionals in Grand Junction, Colorado. We plan to continue to provide interprofessional team training through RITT in FY20 in order to support health care providers throughout our highly rural VISN.

### **Educational Series**

Dementia ECHO: Barriers of cost, time and travel limit access to continuing education and support for rural Community Nursing Home (CNH) staff. Limited education in dementia care can impact quality of patient care and emotional well-being of staff. To address these needs, we started providing virtual trainings via Zoom in February 2019 and delivered eight sessions to three host CNHs by the end of FY19. Topics included Dementia Overview; Preventing Staff Burnout and Resiliency; PTSD and Trauma-Informed Care. Sessions included a brief didactic component and interactive discussions facilitated by a Licensed Clinical Social Worker. A total of 149 individuals participated, including administration, nursing, social services, transportation, med techs, housekeeping, restorative, quality assurance, and residents. To initiate this program, we first outreached to CNH staff by phone to form partnerships and identify facility champions who could assist with the logistics of program implementation.

During these initial conversations, we provided a brief overview and rationale for the proposed free, virtual VA educational offerings. With local buy-in, we conducted a needs assessment to identify priority topics (respondents could select up to 5 interests/educational needs); in total, 13 staff members at 7 facilities were interviewed as part of the needs assessment process. Ongoing contact with facility champions to schedule presentations at times that minimize staff burden (e.g., during weekly all-staff meetings) has been essential to the success of this educational program. Our lessons learned from this educational innovation included: 1) Identify a host CNH for each session to provide an interactive experience. Other CNHs can receive a zoom link to join each session virtually; 2) Virtual training for rural nursing home staff is needed, desired and feasible for addressing the dementia care needs of Veterans; and, 3) An interactive discussion format provides staff with a needed forum to share and process professional experiences including self-care.

### **Other Activity**

**Older Veteran Engagement:** The Older Veteran Engagement Team (OVET) is a group comprised of seven Veterans (six men and three women) and one caregiver who, with one exception, range in age from 63 to 93 and collectively represent every branch of the military. The OVET was formed in January 2018 and has met monthly since. OVET has provided feedback on a range of topics, including: hearing health for Veterans; hospice decision aid; advance care planning website; Safety in Dementia website, which addresses safety concerns related to firearms and driving; walking rehabilitation for lower-limb amputees (Advanced Geriatric Research Fellow project); Home Share and Medical Foster Home programs; and, a new transportation resource hub, which is being developed by the Area Agency on Aging and piloted with Veterans. Importantly, OVET is a resource that supports the translation of research findings into clinical practice through, for example, clinical demonstration projects. As a standard practice of the Eastern Colorado GRECC, OVET members provide their perspectives regarding the implications of research findings for clinical services and how to best implement these services to support older Veterans and caregivers. In addition to the established urban-based group, we are working to expand engagement to include rural-residing Veterans and caregivers.

### **Key GRECC Contributions to National Programs during FY19:**

#### **Educational Product**

**GRECC Connect Case Conference Series:** In FY19, the Eastern Colorado GRECC contributed a case conference to the national program: A Focus on Function: The Next Frontier in Reducing Avoidable Hospital Readmissions, Jennifer Stevens-Lapsley, PT, PhD (July 19, 2019).

#### **Educational Series**

**Geriatric and Palliative Care SCAN ECHO Series:** The purpose of the Eastern Colorado GRECC Geriatric and Palliative Care SCAN ECHO Series is to increase clinical knowledge related to palliative care and geriatrics among rural interdisciplinary VA healthcare team members. Rural primary care teams have limited access to palliative care and geriatric consultation and, thus, benefit from practical, case-based, interactive discussions that enhance their ability to care for frail older adults and their family caregivers. In FY 19, we resumed this popular series after a hiatus the year before due to the move to the new hospital facility; we introduced new topics that reflected Eastern Colorado GRECC clinical innovation and the diverse expertise of our clinical partners. The monthly webinar series included the following geriatric-specific topics: Dementia and Firearms: Clinical and Legal Considerations; Dementia and Caregiver Support; Hearing loss or Dementia – How Hearing Impacts Patient Outcomes; A Focus on Function: The Next Frontier in Reducing Avoidable Hospitalizations; Polypharmacy and Deprescribing; and, Dysphagia Myth Busters: Clarification on Common Swallowing Misperceptions. We also featured the following palliative care topics: Animal-Assisted Therapy and Palliative Care; Resources for Palliative Care and End-of-Life Needs; Caring for Patients Who Use Marijuana at the End of Life: Legal and Medical Implications for VA Clinicians; and PTSD and Trauma-Informed End-of-Life Care. An average of 40 participants from across the country took part in each session. In January, we received EES approval for the monthly series, which allowed us to secure recordings of sessions and create a library of resources available through TMS and our

expanded Eastern Colorado GRECC website (<https://www.denver.va.gov/grecc>).

### **Educational Series**

**Geri Scholars Program:** To provide foundational knowledge and a specific framework for implementing high-intensity, progressive physical therapy with older Veterans at risk for functional decline and rehospitalization, we provided a 2-day Physical Function workshop in May 2019 as part of the Geriatric Scholars program. The workshop provided 44 rehabilitation therapists, representing 17 of the 18 VISNs, who worked primarily in home-based primary care with didactic and experiential training to support the integration of high-intensity rehabilitation principles into practice. Didactic components addressed the following topics: Special Considerations in Geriatric Rehabilitation; Physiology of High Intensity Aerobic & Strength Training; Screening & Safety; High Intensity Intervention Specifics (Details on how to implement); and, Special Populations: Lower Physical Function and Impaired Cognition. The workshop included a half day of laboratory practice with patients to provide participants with opportunities to apply the principles learned. Evaluation: We used a pre-post knowledge assessment to examine participant understanding of core concepts. The post assessment also featured items that examined self-efficacy to perform the specific learning objectives outlined for the workshop, intentions to apply learning in practice and overall participant satisfaction. Participants demonstrated gains in knowledge from pre to post on all knowledge-assessment items. Percent increases in the numbers of respondents who reported correct answers on knowledge assessment items ranged from 217% (how to progress patients within the context of high-intensity rehabilitation) to a 5% increase (how to engage special populations). Participants reported statistically significant gains in self-efficacy to perform the specific learning objectives. Sixty percent of respondents reported intentions to change their professional practice as a result of participating in the workshop. Associated comments described ways that respondents planned to incorporate intensive rehabilitation therapy into their practice and share their learning with others, including other disciplines and caregivers in order to support implementation in the home health setting. Importantly, two respondents noted that the workshop challenged their assumptions regarding the capacity of frail, older adults. Two respondents also noted that they planned to do closer monitoring of vitals as a result of what they learned. Future Directions: 1) long-term follow-up (at 3 months and 6 months) with participants to assess ability to implement principles of progressive, high-intensity physical therapy in practice; 2) providing an intensive practicum experience for a Geriatric Scholar in FY20; and, 3) repeating the Physical Function Workshop in 2021.

### **Evaluation**

**Analysis of Associated Health Training Programs' curricula and interprofessional education:** The VA contributes more to the training of healthcare professionals in geriatrics than any other single entity nationally, with the GRECC network serving as a leader in geriatric-specific, interprofessional education. The Associated Health Training (AHT) Program is the flagship program supported by all GRECCs. In 2016, the Office of Academic Affiliations (OAA) administered a 22-item national survey of AHT programs to characterize the depth and breadth of geriatric-specific interprofessional education across the GRECC network. OAA de-identified responses, which were coded by a workgroup comprised of an OAA representative, as well as Associate Directors for Education and Evaluation (ADEEs) affiliated with Eastern Colorado, Birmingham/Atlanta and Tennessee Valley GRECCs. At least two individuals coded every set of responses independently using a standardized codebook that included operational definitions. Weekly conference calls in FY 18 and 19 provided a structure for comparing and reconciling coding discrepancies. These discussions informed refinements to the codebook and key decisions, which were documented and shared to support interrater reliability. Aggregated findings underscore that GRECC AHT programs provide a vital infrastructure for building workforce capacity through robust, interprofessional training that engages diverse disciplines across a variety of care settings representing the continuum of care for older Veterans. Collective efforts of the GRECC network and OAA have been critical to enhancing the quality, and expanding the capacity, of this workforce to meet needs for personalized and targeted care for the elderly. A poster featuring this work was presented at the 2019GEC Leads Conference with associated manuscripts under development.



**GRECC ADMINISTRATION:****Affiliated academic geriatric medicine program(s):**

University of Colorado School of Medicine

**Affiliated nursing/associated health program(s):****Key collaborations with VAMCs, VISN, CoEs, ORD, EES, or non-VA entities:**

GRECC Connect and SCAN Echo Activities

Team Rehabilitation Center Application - VA RR&D, "Center for Innovative Rehabilitation of Aging Veterans with Severe Disability", submitted July 2019.

**Key collaboration(s) with other GRECCs:**

Collaboration with Durham GRECC on projects related to arthritis and Gerofit. Through Gerofit, collaborations between several GRECCs including Ann Arbor, Little Rock, Los Angeles, Miami, New England, and Baltimore are ongoing.

**MOU agreements:**

Date of MOU with VISN: 2/5/2014

Date of MOU with facility: 2/5/2014

**GRECC Participation with GEC programs:**

With Dr. Robbins' retirement in January 2019, the Rocky Mountain Regional VAMC (RMR-VAMC) will need to identify a new structure for the local Geriatrics and Extended Care Service Line, including a new ACOS for GEC. Dr. Robbins' position as Associate Director for Clinical Demonstrations in the GRECC has been assumed taken over by Dr. Skotti Church. His 3/8 clinical time will be taken by Dr. Ian Reynolds starting November 2019. His role as Section Chief in geriatrics for the RMR-VAMC will transition to be taken by Dr. Larry Bourg.

**Challenges with space or facilities:**

The GRECC Department has officially moved into the new BioScience East Building, now called Building P of the RMR-VAMC, effective July 29, 2019. The COIN has successfully moved into the new building as well, along with a Simulation lab for the Education and Training. Department. Dr. Michael Harris-Love, who is the new Program Director for Physical Therapy at the University of Colorado Anschutz Medical Campus (AMC) affiliate and a VA GRECC Investigator, has relocated to Denver and will move part of his work to Building P. The GRECC area includes a working exercise facility gym for the clinical Gerofit program, previously located on University campus, and now supports 85 enrolled participants at the new VA Building P facility.

**Any problems recruiting high-quality researchers and clinicians:**

None

## **RESEARCH:**

### **Key areas of focus:**

Treatment and consequences of obesity in older veterans  
Gender differences in the health of Veterans  
Intensive approaches to rehabilitation to improve function in older Veterans

### **Interdisciplinary research teams:**

Since 2014, when the Eastern Colorado GRECC was launched, several interdisciplinary research teams have developed:

- Jennifer Stevens-Lapsley, PT PhD, and Cory Christiansen, PT PhD, have assembled an outstanding research team that includes physical therapists, geriatricians, engineers, physiologists, health services scientists, and dissemination experts to advance research on improving physical function in older Veterans with complex medical issues. Their work includes several focus areas: 1) rehabilitation clinical trials that utilize intensive interventions for medically complex patients; 2) health services research that seeks to improve health care utilization through rehabilitation; 3) personalized rehabilitation focused on prediction analytics to inform shared decision-making; 4) investigation of movement dysfunction in special populations (e.g., lower limb amputees); and 5) use of wearable technologies to provide rehabilitation biofeedback.
- Lauren Abbate, MD, is the medical director of the Eastern Colorado GRECC Gerofit program. She has assembled a multidisciplinary research team to develop novel approaches for expanding the Gerofit program to hard-to-reach Veterans, including those in rural areas. She is working with exercise physiologists with expertise in program development and faculty members in the COIN who have extensive experience with tele-technology to develop a Peleton-like program whereby Veterans in remote locations can engage in exercise sessions with other Veterans through live-stream interactions.
- Daniel Matlock, MD, Russell Glasgow, PhD, and Hilary Lum, MD, are the leaders of the Eastern Colorado GRECC Dissemination and Implementation Science team. They have close collaborations with faculty in the COIN and with the university-based ACCORDS program (Adult and Child Consortium for Health Outcomes Research and Delivery Service). Current research focus areas include 1) shared decision-making in healthcare; 2) complex multi-level medical system interventions; 3) patient- and system-level pragmatic interventions in older Veterans; and 4) use of dissemination and implementation models for planning, adaptation, evaluation, and sustainability.
- Dwight Klemm, PhD, is an adipocyte biologist who discovered a novel adipocyte that arises from a bone marrow-derived hematopoietic progenitor, rather than from an adipose tissue-resident mesenchymal progenitor. When compared with conventional adipocytes, bone marrow-derived adipocytes are highly inflammatory and tend to accumulate primarily in visceral fat depots. He has teamed up with Kathleen Gavin, PhD, a clinical integrative physiologist, to advance translational research on the relevance of his findings in mice to humans.
- Wendy Kohrt, PhD, is the Director of a university-based NIH U54 Specialized Center of Research Excellence (SCORE) in Sex Differences. Several GRECC investigators are members of the SCORE. Pilot funding (~\$100,000 annually) and training opportunities supported by the SCORE are extended to VA investigators.

### **Challenges with adequate space or resources to conduct research:**

Prior to July 29, 2019, the GRECC did not have any office or clinical research space at the RMR VAMC (or at the old facility prior to the move). Because the VA is an affiliate member of the university-based Colorado Clinical and Translational Sciences Institute (CCTSI), all resources supported by the CCTSI can be utilized by VA investigators. These resources include inpatient and outpatient research centers and core laboratories. Therefore, most GRECC research to date has been conducted in CCTSI facilities at the university. New projects will utilize VA space, as appropriate. On July 29, 2019, the GRECC and COIN moved into renovated space in Building P, which is a VA-leased building adjacent to the VA campus. GRECC research space in Building P includes wet bench space for sample processing, three exam rooms, an exercise training facility, a body composition lab, and limited physiological testing space. Because the



RMR VAMC has very limited clinical research space (one exam room dedicated to research), the hope is that GRECC research facilities will be operated as a shared resource that other clinical VA investigators can utilize. Resources needed to manage the facility in this manner (e.g., clinic manager, scheduling mechanism) are not yet in place. Two additional barriers will limit the usability of the GRECC research space until they can be resolved: 1) Investigational products managed by the VA pharmacy apparently cannot be stored in Building P. 2) There is no mechanism in place for transporting biospecimens collected in Building P to the hospital lab or bench labs, which is a problem for assays that require fresh samples.

**Goals for research in the coming year:**

- Continue to support a cadre of GRECC investigators who are diverse with respect to seniority (junior, mid-career, senior) and translational research focus (basic, preclinical, clinical, population science).
- Continue to expand both our VA-sponsored research portfolio and our NIH-sponsored research studies that are open to and actively recruiting Veterans. We currently have approximately 10 VA applications (merit review, CDA2, center) that are in varying stages of revision or development. GRECC leadership will continue to work with the investigators to improve their applications. Drs. Jennifer Stevens-Lapsley and Richard Weir have Rehabilitation Center and REAP applications that are pending. If they are selected for site visits, the GRECC will help coordinate the visits. If they are selected for funding, the GRECC will assist with implementation of the new awards.
- A specific goal for the coming year is to open the NIH Common Fund initiative known as MoTrPAC (Molecular Transducers of Physical Activity Consortium) at the RMR VAMC. MoTrPAC includes a large (N=2,300) exercise intervention trial that will be carried out at 11 clinical sites across the country, including the University of Colorado. MoTrPAC will collect biospecimens (blood, muscle, adipose) from participants before, during, and after acute exercise sessions conducted before and after an exercise intervention. The biospecimens will be subjected to multiple 'omics assays (genomics, epigenomics, transcriptomics, proteomics, metabolomics, exosomics) at labs across the country. The resulting 'map' of molecular responses to exercise will be shared with the scientific community to advance the understanding of the molecular mechanisms for the many health benefits of exercise. Several of the MoTrPAC clinical sites are at academic institutions that have VA affiliates, but only Colorado plans to formally engage their VA partner (RMR VAMC). This will be facilitated by Dr. Kohrt, who is the PI of the Colorado clinical site and chair of the MoTrPAC Steering Committee.
- Another specific goal for the coming year is to help Dr. Michael Harris-Love build his GRECC-affiliated research program. Dr. Harris-Love is the new Director of the University of Colorado Program in Physical Therapy. He was previously at George Washington University and the Washington DC VA Medical Center, and transferred his VA-sponsored research to the RMR VAMC. Space within the GRECC research facility is being developed for him.
- Maintain a GRECC voice in the RMR VAMC research enterprise. Dr. Kohrt will continue to be a standing member of the Research and Development Committee and Dr. Stevens-Lapsley will serve as the alternate member in her absence.
- Solicit applications and select outstanding candidates for GRECC Advanced Research Fellowships. Over the last four years, the Eastern Colorado GRECC has supported Advanced Research Fellows from a broad range of disciplines (endocrinology, physical therapy, occupational therapy, surgery, emergency medicine). For FY20, solicitations will be distributed December 1, letters of intent will be due February 1, invited applications will be due March 15, and selections will be made by May 1.

## **EDUCATION and EVALUATION:**

### **Key committee memberships:**

VISN reorganization; committees being established  
PREVENTS Lethal Means Work Group  
Pharmacy and Therapeutics Committee

### **Linkages between GRECC and VISN/VACO training efforts:**

The Audiology externs, Pharmacy residents, Social Work students and Psychology interns who receive training in the facility extend our capacity to care for older Veterans. These clinical training positions are an integral part of our overall educational mission. Our objective is that, because of these positive experiences, trainees will wish to return to the facility on a permanent basis. At a minimum, our training efforts will enhance aging-related healthcare capacity nationally. On average, 40% of trainees represented in the Associated Health Training Program, are hired within the VA, either at the Rocky Mountain Regional VA Medical Center or another VA nationally.

### **Medical student training experiences in GRECC:**

One 3rd-year medical student rotates with Geriatric Medicine faculty each month during their Community and Primary Care Clerkship. Each student receives a two-hour lecture from Dr. Church; participates in GRECC/Division of Geriatric Medicine Grand Rounds presentations and journal club discussions; and, does one home visit through Home Based Primary Care. During the 4th year medical student Geriatric Medicine elective, students participate in Geriatric primary care clinics, VA tele-geriatric consultations, sub-acute rehabilitation rounds, morning didactics and GRECC/Geriatric Medicine Grand Rounds presentations. They also have frequent interactions with Internal Medicine residents and Geriatric Medicine fellows.

### **Medical resident and fellow training experiences in geriatrics clinics and CLCs:**

All primary care, categorical and Med/Peds Internal Medicine residents are required to spend 4 weeks on Geriatric Medicine, including rounding at the State Veterans Home subacute rehabilitation facility (in lieu of the CLC) with GRECC/Geriatrics faculty. They also participate in Home Based Primary Care visits and Tele-geriatrics consultations, including Tele-dementia and Tele-palliative care. The Internal Medicine residents attend the weekday morning didactic lectures, Geriatric Medicine Grand Rounds, and Journal Club. Every other month, there is a shared GRECC/COIN/MIRECC Grand Rounds. The Friday Educational Conference series brings together residents, Geriatric Medicine Fellows and Associated Health Trainees every Friday. Medicine residents attend an older-adult oriented Internal Medicine clinic supervised by Dr. Ian Reynolds (former Geriatric Medicine fellow), as well as the Geriatrics primary care clinic. Fellows participate in all these educational experiences while meeting their other ACGME clinical requirements. Two of our 4 clinical Geriatric Medicine Fellowship positions are funded by the VA and 2 by the University of Colorado Hospital. In addition, we have 4 Advanced GRECC Research fellow positions each year (2 fellows for 2 years each). Our nine GRECC-funded Associated Health Trainees represent 4 disciplines (Audiology, Psychology, Social Work and Pharmacy). We have 4 additional non-GRECC supported trainees (three pharmacy trainees and one audiology extern).

### **Geriatric medicine fellowship(s) at affiliates:**

University of Colorado

### **Advanced fellowships:**

Audiology, dentistry, nursing, optometry, pharmacy, physical therapy, occupational therapy, podiatry, psychology and speech pathology

**Number of GRECC Advanced Fellows in FY19:**

5

<b>Affiliated Health Trainees:</b>	<b># OAA-Approved Slots</b>	<b># Filled Slots</b>	<b># Non-OAA Slots</b>
Audiology/Speech Pathology	3	3	1
Psychology	1	1	
Pharmacy	3	3	3
Social Work	2	1	

**Medical Trainees:**

Geriatric Medicine Fellow	4
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**Education and Evaluation Products and Projects during FY19:****Education and Evaluation Activities:**

Geriatric Scholars Physical Function Workshop: To provide foundational knowledge and a specific framework for implementing high-intensity, progressive physical therapy with older Veterans at risk for functional decline and rehospitalization, we provided a 2-day Physical Function workshop in May 2019 as part of the Geriatric Scholars program. The workshop provided 44 rehabilitation therapists, representing 17 of the 18 VISNs, who worked primarily in home-based primary care with didactic and experiential training to support the integration of high-intensity rehabilitation principles into practice. Didactic components addressed the following topics: Special Considerations in Geriatric Rehabilitation; Physiology of High Intensity Aerobic & Strength Training; Screening & Safety; High Intensity Intervention Specifics (Details on how to implement); and, Special Populations: Lower Physical Function and Impaired Cognition. The workshop included a half day of laboratory practice with patients to provide participants with opportunities to apply the principles learned. Evaluation: We used a pre-post knowledge assessment to examine participant understanding of core concepts. The post assessment also featured items that examined self-efficacy to perform the specific learning objectives outlined for the workshop, intentions to apply learning in practice and overall participant satisfaction. Participants demonstrated gains in knowledge from pre to post on all knowledge-assessment items. Percent increases in the numbers of respondents who reported correct answers on knowledge assessment items ranged from 217% (how to progress patients within the context of high-intensity rehabilitation) to a 5% increase (how to engage special populations). Participants reported statistically significant gains in self-efficacy to perform the specific learning objectives. Sixty percent of respondents reported intentions to change their professional practice as a result of participating in the workshop. Associated comments described ways that respondents planned to incorporate intensive rehabilitation therapy into their practice and share their learning with others, including other disciplines and caregivers in order to support implementation in the home health setting. Importantly, two respondents noted that the workshop challenged their assumptions regarding the capacity of frail, older adults. Two respondents also noted that they planned to do closer monitoring of vitals as a result of what they learned. Future Directions: Providing an intensive practicum experience for a Geriatric Scholar in FY20.

**Education and Evaluation Activities:**

Team Huddles Educational Activities: GRECC-supported audiology externs use “team huddles” to provide other members of the care team with information about the hearing health needs of their patients and to reinforce audiology best practices. Audiology trainees review patient charts prior to huddles and identify patients who have not had a hearing health evaluation for over a year. Externs give providers, geriatric medicine fellows specifically, audiology referral cards to give to these patients in order to facilitate addressing their hearing health needs. Team huddles also provide regular opportunities to reinforce audiology best practices in patient encounters to address documented gaps in formal audiology training among health professionals. Evaluation: Audiology externs determine whether patients have a follow-up visit with audiology, the time between the primary visit and the audiology appointment, and issues addressed. This work began two years ago as

a clinical demonstration project informed by a formal needs assessment of internal medicine residents, geriatric medicine fellows, associated health trainees and GRECC clinical faculty to explore extent of formal audiology-related training, frequency of and confidence in performing audiology best practices. Dissemination: The FY18 audiology externs presented a poster titled “Targeted Audiologic Education for Trainees: Needs and Deficits” at the 2018 American Geriatrics Society Annual Meeting (Orlando, FL). In addition, they were invited to present the products of their clinical demonstration project (e.g., observational protocol and audiology needs assessment) during the AGS Education Product Showcase at this meeting. Most recently, we presented a poster featuring this work at the 2019 GEC Leads Conference.

#### **Education and Evaluation Activities:**

**Geriatric and Palliative Care SCAN ECHO Series:** The purpose of the Eastern Colorado GRECC Geriatric and Palliative Care SCAN ECHO Series is to increase clinical knowledge related to palliative care and geriatrics among rural interdisciplinary VA healthcare team members. Rural primary care teams have limited access to palliative care and geriatric consultation and, thus, benefit from practical, case-based, interactive discussions that enhance their ability to care for frail older adults and their family caregivers. In FY 19, we resumed this popular series after a hiatus the year before due to the move to the new hospital facility; we introduced new topics that reflected GRECC clinical innovation and the diverse expertise of our clinical partners. The monthly webinar series included the following geriatric-specific topics: Dementia and Firearms: Clinical and Legal Considerations; Dementia and Caregiver Support; Hearing loss or Dementia – How Hearing Impacts Patient Outcomes; A Focus on Function: The Next Frontier in Reducing Avoidable Hospitalizations; Polypharmacy and Deprescribing; and, Dysphagia Myth Busters: Clarification on Common Swallowing Misperceptions. We also featured the following palliative care topics: Animal-Assisted Therapy and Palliative Care; Resources for Palliative Care and End-of-Life Needs; Caring for Patients Who Use Marijuana at the End of Life: Legal and Medical Implications for VA Clinicians; and PTSD and Trauma-Informed End-of-Life Care. **Evaluation:** Individual sessions are formally evaluated by EES. **Dissemination:** In January, we received EES approval for the monthly series, which allowed us to secure recordings of sessions and create a library of resources available through TMS and our expanded Eastern Colorado GRECC website (<https://www.denver.va.gov/grecc>). **Future Directions:** We are not planning to continue the Geriatric and Palliative Care SCAN ECHO series. Participation in the series did not meet our expectations based on the robust and consistent participation that we experienced in 2016 and 2017. Presently, there are many such educational opportunities that we can contribute to, such as the GRECC national webinar series. We will reinvest time and energy in supporting the educational needs of our VISN and medical centers in collaboration with associated GEC leads.

#### **Education and Evaluation Activities:**

**Ethics Seminar Series:** First introduced in FY18, this every-other-month (5-part) interprofessional series 1) hones skills in recognizing clinical ethical dilemmas, 2) increases awareness of resources to engage when an ethical dilemma arises in the course of patient care, and 3) enhances the ability to engage in interprofessional, patient-centered decision-making processes to reach a solution that honors diverse values of stakeholders. We begin the series each year with a presentation on ageism called Changing the Narrative, which is delivered by a national trainer (Janine Vanderburg). This presentation and ensuing discussion set the stage for the rest of the series by surfacing implicit and explicit biases that can influence clinical decision-making and limit our awareness of alternative perspectives and values. We then learn about and practice applying two ethical decision-making frameworks: the 8-step approach to ethical decision-making developed by the Center for Bioethics, University of Colorado Anschutz Medical Campus, and the VA’s CASES approach. We use real clinical ethics cases to work through each model as a systematic approach to exploring and considering

different values and disciplinary perspectives on a case, as well as the clinical information available and the variety of possible courses of action before reaching a decision. These deliberations take place in small groups, involving each discipline represented in the Associated Health Training program. Each group shares the content and ultimate decision that they reached. We compare the approaches and how the final care plan was reached. The series concludes with a variety of specific topics such as elder abuse. Dissemination: A poster featuring the ethics case conference series and evaluation approach was presented at the 2019 American Geriatrics Society Annual Meeting (Portland, OR).

#### **Education and Evaluation Activities:**

Dementia ECHO: Barriers of cost, time and travel limit access to continuing education and support for rural Community Nursing Home (CNH) staff. Limited education in dementia care can impact quality of patient care and emotional well-being of staff. To address these needs, we started providing virtual trainings via Zoom in February 2019 and delivered eight sessions to three host CNHs by the end of FY19. Topics included Dementia Overview; Preventing Staff Burnout and Resiliency; PTSD and Trauma-Informed Care. Sessions included a brief didactic component and interactive discussions facilitated by a Licensed Clinical Social Worker. A total of 149 individuals participated, including administration, nursing, social services, transportation, med techs, housekeeping, restorative, quality assurance, and residents. Of note, staff member discussions led to the provision of Veteran-specific education to address local needs. To initiate this program, we first outreached to CNH staff by phone to form partnerships and identify facility champions who could assist with the logistics of program implementation. During these initial conversations, we provided a brief overview and rationale for the proposed free, virtual VA educational offerings. With local buy-in, we conducted a needs assessment to identify priority topics (respondents could select up to 5 interests/educational needs); in total, 13 staff members at 7 facilities were interviewed as part of the needs assessment process. Ongoing contact with facility champions to schedule presentations at times that minimize staff burden (e.g., during weekly all-staff meetings) has been essential to the success of this educational program. Our lessons learned from this educational innovation included: 1) Identify a host CNH for each session to provide an interactive experience. Other CNHs can receive a zoom link to join each session virtually; 2) Virtual training for rural nursing home staff is needed, desired and feasible for addressing the dementia care needs of Veterans; and, 3) An interactive discussion format provides staff with a needed forum to share and process professional experiences including self-care. Dissemination: A poster featuring the Dementia ECHO program was presented at the 2019 GEC Leads Conference. Future Directions: 1) Maintain relationships to inform ongoing delivery of education; 2) Make training available on demand by archiving video recordings on a public access web platform, and 3) Assess changes in attitudes and competencies among staff (associated evaluation instrument was developed in FY19).

#### **Education and Evaluation Activities:**

Telehealth Training Activities: In FY19, we continued to integrate Associated Health Trainees and Geriatric Medicine Fellows into tele-geriatric and tele-palliative care consultations for older Veterans at CBOCs and contract nursing facilities, as well as in their own homes. As a GRECC Connect hub, Eastern Colorado is considered a “high volume” site. Eastern Colorado also stands out nationally among GRECC Connect hubs in offering tele-palliative care and video on demand for dementia care and caregiver support. These clinical innovations offer unique training opportunities. FY19 Update: We implemented our new telehealth training model: 1. Core didactics provided within the first month of the training program to introduce skills, common challenges, and important tips when working with older patients and caregivers via telehealth, and with providers with limited Geriatric expertise working in resource-limited contexts. 2. Direct observation and modeling by preceptors, followed by structured opportunities to debrief what the trainee observed and address questions.

Depending on the type of trainee, observations may occur as a shadowing opportunity and/or at the beginning of a telehealth rotation. 3. Providing geriatric telehealth care, supported by the interprofessional team and feedback and reflection. Evaluation based on Individual Learning Plans: Trainees complete a telehealth competency self-assessment at the beginning and end of their telehealth experience. The preceptor and trainee review the pre assessment and identify specific competencies on which to focus telehealth professional development. A guide to support the structured debrief following each telehealth clinic repeatedly focuses reflective practice on these prioritized competencies. Preceptors document individual learning plans. Recurring themes in terms of prioritized competencies/professional development needs iteratively inform core didactics. Dr. Nearing developed the self-assessment and debriefing guide based on recently published systematic reviews and subsequently collaborated with the Eastern Colorado GRECC Connect interprofessional team to refine the tools and evaluation process. Dissemination: Eastern Colorado GRECC's innovative telehealth training model and trainee-centered competency development process was featured as a poster at the 2019 Gerontological Society of American Annual Scientific Meeting. Future Directions: Partner with the collocated sim lab to create simulated telehealth consultation experiences, using a variety of modalities, to provide additional opportunities to practice skills with preceptor support before engaging with actual patients. Establish evidence regarding effectiveness of innovative educational model and continue to disseminate nationally, through GRECC Connect hubs and, potentially, Geri Scholars program.

#### **Education and Evaluation Activities:**

Interprofessional Case Conference Series: A monthly Interprofessional Case Conference Series provides an opportunity for all Eastern Colorado GRECC Associated Health Trainees (n= 12) and Geriatric Medicine Fellows (n= 4) to practice the art and science of co-creating care plans that integrate the expertise of multiple disciplines. During each case conference, each trainee receives discipline-specific information from a real case, but that would be most applicable/available to a discipline other than their own. (For example, an audiology extern might receive a list of medications.) Consequently, trainees must practice asking open-ended questions to solicit the knowledge/information held by other team members to inform care decisions. Dr. Nearing detailed efforts to disseminate this innovative model of interprofessional education in the FY18 progress report. FY 19 Refinements: providing more background knowledge about other disciplines prior to first case conference through Associated Health Training program orientation and shadowing opportunities; modeling by preceptors at first case conference; and, using classes of drugs rather than medication lists. Evaluation: Dr. Nearing continues to assess the development of interprofessional competencies and the perceived value of the interprofessional case conference using the validated Interprofessional Collaborator Assessment Rubric (ICAR; administered in September, January and April) and trainee exit interviews. In FY19, pre-post matched ICAR results demonstrated significant growth on interprofessional collaboration skills most closely aligned with those emphasized by the Interprofessional Case Conference. During an exit interview, one Geriatric Medicine Fellow stated, "There have been more interprofessional discussions this past year than I had all three years of residency ... You can really head off a lot of questions or unnecessary consultations with team meetings. They are educational, as well. Whenever you have different disciplines coming together, that's when little drops of knowledge occur." Dissemination: Dr. Nearing shared information about the interprofessional case conference, including the evaluation approach and instruments, with ADEEs at the Pittsburgh and Minneapolis GRECCs. A poster featuring the model and key program outcomes was presented at the 2018 Western Group on Educational Affairs Regional Meeting (March 2018 in Denver, Colorado). Future directions: integrating nurse residents and PT resident and using smaller breakout groups (with each discipline represented) to adjust for program expansion.



## **CLINICAL:**

### **Clinical Demonstration Projects:**

#### **Access to Care Rounds**

**Project Leader:** Lum

**Project started:** 10/1/2017

**Anticipated completion date:** 9/30/2022

**Current stage of project:** Evaluation (including testing and use)

**MOU funding received:** \$0

#### **Project outcome:**

Improved care coordination; increase and strengthen diverse VA-community partnerships.

#### **Target population:**

Any Veteran or family member, including rural-residing Veterans and caregivers. VA and community-based service providers.

#### **Description of project:**

The goal of Access to Care Rounds is to improve care for Veterans with complex needs and their family member or caregivers. This model was developed with stakeholder input from the Colorado Veteran Community Partnership. Activities: Access to Care Rounds convenes community- and VA-based practitioners and staff approximately every other month to discuss a Veteran's situation for the purpose of care coordination and increasing access to appropriate health care and social services. A cross-sector panel discusses specific efforts to link a medically-complex older veteran to resources or services. Lessons learned regarding care coordination between the VA and community-based service providers are highlighted and key processes and resources that others can utilize to better serve veterans are shared. In FY18, this model has been held at the Rocky Mountain Regional VA Medical Center, hosted in partnership with Joining Community Forces (a community group), and held as part of the Rocky Mountain Geriatrics Conference.

#### **Main accomplishments for FY19:**

Expansion of the model, including Access to Care Rounds held five times. Inclusion of diverse community and VA stakeholders. Approximately 47 attendees at each session represented medicine (39%), social services (15%), mental health (6%), other (27%).

#### **Evaluation Activities**

Quantitative feedback indicated overall satisfaction in the presentations and information shared and gained. Twenty-four percent of participants indicated they would make a change in their professional practice, 9.1% indicated plans to change policy/procedures, and 15.2% mentioned other changes they intended on making (e.g. new info to provide to Veterans benefits, how to coordinate claims for hospice and nursing homes) after attending Access to Care Rounds. Responses to open-ended questions solicited feedback that led us to provide more detailed information regarding resources in both panel presentations and through one-page resource sheets distributed at each Access to Care Rounds.

#### **Goals for current year**

Conduct five-six Access to Care Rounds. Disseminate the model through a GRECC podcast, Colorado Veteran Community Partnership website, and national Veteran Community Partnership monthly call (~March 2020).

## ECHCS GRECC Connect

**Project Leader:** Lum  
**Project started:** 10/1/2017  
**Anticipated completion date:** 9/30/2022  
**Current stage of project:** Dissemination to other sites  
**MOU funding received:** \$179,062

### **Project outcome:**

Improvement in veteran health outcomes, including decreased polypharmacy and increased referral to appropriate VA and community referrals and services.

### **Target population:**

Any veteran or family member, including rural. VA CBOC staff.

### **Description of project:**

Eastern Colorado joined GRECC Connect in FY18. The goal of GRECC Connect is to improve access to geriatric care for Veterans in rural areas. Older Veterans living in rural areas often have limited access to geriatric care and rural providers and staff often lack opportunities to learn about best practices for management of Veterans with geriatrics syndromes. The Eastern Colorado GRECC links geriatrics specialists (geriatricians, geropsychologist, social workers, pharmacists, audiologists and interprofessional trainees), located at Rocky Mountain Regional VAMC with outlying community-based outreach clinics (CBOCs) and Veterans in their homes. Activities: Current modalities include clinical video telehealth (to CBOCs and thru VA Video Connect), electronic consultation, and educational teleconferences. Consultation is provided in tele-geriatrics and tele-geropsychology. All visits are transdisciplinary with at least physician, social worker, and pharmacist input. Many veterans and caregivers are also seen by the geropsychologist, especially related to dementia and caregiver support needs. Through this project, we aim to equip rural providers and staff with knowledge and skills to care for older adults, support staff at rural clinics by providing geriatrics and geropsychology consultation, and raise awareness of needs and services for older rural veterans through outreach. In FY19, this clinical demonstration project was linked to an educational project. We developed a formal telehealth geriatric curriculum for interprofessional training. Findings were accepted for presentation at the 2019 GSA meeting.

### **Main accomplishments for FY19:**

Ongoing telehealth consultation to 7 CBOCs; 29 unique veterans seen for a total of 43 visits; expanded to Cheyenne; accepted publication.

### **Evaluation Activities**

In FY18, the GRECC Connect program served 154 veterans and resulted in 30,412 miles saved by providing tele-health visits closer to the veterans' residence. In FY19, the GRECC Connect program served 258 veterans, through 161 tele-geriatrics visits, 97 tele-geropsychology visits, and resulted in 48,920 miles saved by providing tele-health visits closer to the veterans' residence. There were 312 total visits, including 265 CBOC visits and 47 of these visits were through VA Video Connect to the Veteran's home. Detailed evaluation was provided in coordination with the national GRECC Connect program (PI: William Hung, Bronx VA GRECC), led by Dr. Kady Nearing (Eastern Colorado ADEE) and reported to the Office of Rural Health.

### **Goals for current year**

Transition site leadership to Dr. Ian Reynolds; strengthen relationship with CBOCs; expand to 1 full day of tele-geriatric consultation and partnering with tele-palliative care; refine curriculum.

## **Interdisciplinary Mobility Program for Veterans in Skilled Nursing Facilities**

**Project Leader:** Stevens-Lapsley  
**Project started:** 9/1/2018  
**Anticipated completion date:** 12/31/2020  
**Current stage of project:** Field testing, not yet evaluated  
**MOU funding received:** \$0

### **Project outcome:**

The goal is to evaluate whether an interdisciplinary, targeted walking program will improve functional outcomes in Veterans in a skilled nursing facility.

### **Target population:**

Patients in a skilled nursing facility, although nursing, CNA, and other health professionals will also be involved in training and implementation of mobility program.

### **Description of project:**

Our previous efforts to address hospital-associated deconditioning in the SNF using high-intensity, functional resistance training during rehabilitation (titled i-STRONGER, ["IntenSive Therapeutic Rehabilitation for Older Skilled NursinG Home Residents"]) demonstrated superior outcomes including improvements in physical function and gait speed, increased rates of community discharge, and cost-effective reductions in length of stay compared to usual care. However, during a typical SNF stay, patients receive rehabilitation for 1-2 hours of their day and remain sedentary for up to 14 waking hours, which is not reflective of the mobility levels needed to thrive in the community. A critical question extending from the previous trial is whether the positive functional results demonstrated with i-STRONGER are negated by sedentary behavior outside of structured rehabilitation. Barriers to mobility outside of structured rehabilitation include perceived safety concerns (pain, falls), staff shortages, lack of formal training on safety and equipment use, time constraints, and interdisciplinary communication barriers. This gap provides an excellent opportunity for the interdisciplinary SNF team to collaborate and use supplemental mobility as a non-pharmacological method to extend the gains made during formal rehabilitation sessions to levels appropriate for discharge into the community and set the stage for larger scale dissemination and implementation efforts. Thus, we developed High-Intensity Rehabilitation + Mobility (HeRo) to determine the feasibility of adding an interdisciplinary, patient-centered mobility program to the previously effective i-STRONGER. HeRo is an approach to engaging patients in their functional recovery after hospitalization through integration of behavioral economics techniques. The emerging intersection of healthcare and behavioral economics uses incentives, social norms, technology, and gamification to optimize health. Furthermore, we will assess feasibility using qualitative methods in combination with implementation evaluation to better understand how to overcome barriers to supplemental mobility in the SNF, which is critical to rapidly translating the results of this study for broader dissemination and impact on Veteran care in SNFs nationwide.

### **Main accomplishments for FY19:**

Prepared proposal and received funding in August 2019. Began planning of behavioral economics strategies for implementation and began hiring of personnel.

### **Evaluation Activities**

Patient outcomes include dose (frequency, duration, intensity of mobility engagement), functional performance and surveys assessing mobility preferences. Will also include evaluation of fidelity of intervention and adaptations made in collaboration/ consultation with staff at facility, as well as their impressions regarding feasibility and effectiveness of mobility program.

### **Goals for current year**

Fully develop all intervention and assessment methods and begin implementation of program on all willing Veterans at the Fitzsimmons State Veterans Home.

## Targeted Audiologic Training for Associated Health Trainees and Geriatric Medicine Fellows

**Project Leader:** Church

**Project started:** 7/1/2017

**Anticipated completion date:** 5/30/2022

**Current stage of project:** Evaluation (including testing and use)

**MOU funding received:** \$0

### **Project outcome:**

Increased access to training in audiology best practices (our needs assessment confirms the trainees typically receive no or very little formal training in audiology-related best practices).

### **Target population:**

- Trainees: Associated Health Trainees (n= 12 in FY18); Geriatric Medicine Fellows (n= 3 in FY18)
- GRECC Clinical Faculty
- Older Veterans with hearing loss

### **Description of project:**

The goal of this project is to increase the integration of audiology best practices in the care of older Veterans. Specific activities include:

- Interprofessional team huddle. Audiology trainees review patient charts, surface audiology-related patient context/considerations, make recommendations before fellows see patients. For patients that have never been seen in audiology or are overdue, audiology externs give Geriatric Medicine Fellows a card to give to the patient, which encourages the patient to make a follow-up appointment in audiology.
- Delivery of case-based education (through GRECC didactic offerings), primarily Friday Educational Conferences; all audiology externs have opportunities to present.
- Direct clinical observations of Geriatric Medicine Fellows' during clinical visits - specific feedback given following final pre and final post observation (Noting themes across a given fellow's set of observations: What was observed? What was done well? Recommendations to improve audiology-related practices).

### **Main accomplishments for FY19:**

Presented poster at the 2018 American Geriatrics Society Annual Meeting. Completed intervention & data collection for cohort 2018-19. Initiation for class of 2019-20 (8 geriatric medicine fellows).

### **Evaluation Activities**

- Pre/Post assessment of knowledge, confidence and access to audiology education
- Clinical observations of Geriatric Medicine Fellows guided by a standardized protocol. Key outcome: changes in clinical practice related to the integration of audiology best practices

### **Goals for current year**

Expand FY19 evaluation to include pre/post assessment using both the needs assessment survey observational protocol. 3-yr survey of cohort for continued educational needs and application of knowledge in current clinical practice.

## Tele-Palliative Care

**Project Leader:** Lum  
**Project started:** 10/1/2018  
**Anticipated completion date:** 9/30/2022  
**Current stage of project:** Evaluation (including testing and use)  
**MOU funding received:** \$0

### **Project outcome:**

Improvement in outcomes for rural Veterans with serious illnesses and their caregivers.

### **Target population:**

Rural veterans with serious or life-limiting illnesses.

### **Description of project:**

Veterans living with serious illness and in rural areas have limited access to specialty palliative care. We developed and implemented a transdisciplinary team-based telehealth palliative care consultation program. Veterans are seen by a palliative care provider, social worker and pharmacist. Veterans can be referred from six outlying community-based outreach clinics (CBOCs) and Cheyenne VAMC catchment area through interfacility consultation. **Activities:** Current modalities include clinical video telehealth to CBOCs and veteran homes through VA Video Connect. Based on veteran needs, appropriate referrals are placed community palliative care or hospice care.

### **Main accomplishments for FY19:**

- Provided consultation to 3 Eastern Colorado CBOCs and 11 Veterans thru VA Video Connect
- Expanded reach to Cheyenne through interfacility consults, including Cheyenne VAMC and Loveland CBOC

### **Evaluation Activities**

In FY19, the GRECC Connect program served 54 veterans and resulted in 8,532 miles saved by providing tele-health palliative care visits closer to the veterans' residence.

### **Goals for current year**

We will train a new palliative care provider to provide telehealth consultation. We will develop and implement a tele-health Goals of Care Clinic to provide veterans with counseling related to the Life-Sustaining Treatment Initiative.

## Vet Connect

**Project Leader:** Lum  
**Project started:** 6/2/2017  
**Anticipated completion date:** 9/30/2020  
**Current stage of project:** Evaluation (including testing and use)  
**MOU funding received:** \$0

### **Project outcome:**

Improve access to care, safety, and care coordination for older Veterans in VA contracted community nursing.

### **Target population:**

Veterans living in VA contracted community nursing homes.

### **Description of project:**

As part of GRECC Connect, we are partnering with Dr. Cari Levy and the COIN in the Office of Rural In partnership with Dr. Cari Levy, the Denver-Seattle COIN, and the previously funded VA Office of Rural Health clinical demonstration project, VetConnect, the goals of the current VetConnect program continue to be conducting telehealth geriatric, palliative care, and psychotherapy visits to Veterans in community nursing homes (CNHs). Program reach includes Denver Metro CNH facilities and rural State Veteran Nursing Homes (SVHs). **Activities:** VetConnect addresses the challenges facing Veterans transitioning from VA hospitals to CNHs for sub-acute rehab or long-term care after an acute illness. The program provides access for Veterans, CNH staff, and VA staff to coordinate care to improve Veteran care, safety, and care coordination. In FY18, the VetConnect team provided 309 telehealth visits (223 to CNH and 86 to SVHs)

to three SVHs and 11 CNHs in five specialties: Geriatrics, Palliative/Hospice care, Mental Health, Psychiatry, and Palliative Care Psychology, and with 9 different providers. Responding to CNH staff needs and preferences, the VetConnect team developed and implemented a virtual educational series for nursing home staff.

### **Main accomplishments for FY:**

In FY19, the VetConnect team provided 341 tele-visits (231 to CNHs and 110 to SVHs) and engaged with three SVHs and 13 CNHs in five specialties, with 7 different providers. Conducted six virtual educational sessions on dementia education.

### **Evaluation Activities**

Evaluation activities were led by Dr. Cari Levy of the COIN and reported to the VA Office of Rural Health. Team nurses documented fieldnotes and visit information over the course of the tele-visits. Process maps were created by the VetConnect team to illustrate the implementation and maintenance of VetConnect. Qualitative interviews were also conducted with project nurses, nursing home staff, and VA providers involved with the project. Ongoing evaluation efforts include chart reviews to determine uptake of VA recommendations.

### **Goals for current year**

In FY20, VetConnect will focus on strengthening relationships with existing CNHs and SVHs while expanding to additional facilities so that telehealth visits to Veterans living in rural CNHs and SVHs can continue.



## Virtual Tours for Community Nursing Homes: Improve Care Coordination via Video Technology

**Project Leader:** Lum  
**Project started:** 3/1/2018  
**Anticipated completion date:** 9/30/2022  
**Current stage of project:** Field testing, not yet evaluated  
**MOU funding received:** \$0

### **Project outcome:**

Provide Veteran-centered care coordination in patient transition from inpatient stay to VA nursing homes for subacute rehab.

### **Target population:**

Any Veteran in transition between inpatient stay and a nursing facility.

### **Description of project:**

The goal of Virtual Visits is to aid in Veterans' transition from inpatient hospital stay to nursing facilities. Through virtual tours to nursing homes prior to discharge, Veterans and their families may ask questions, see potential future living quarters, and make educated choices regarding their future health care. **Activities:** VA inpatient Social Workers identify appropriate patients and offer them the option of participating in a tour. If the Veteran or Veteran's family is interested, the project team coordinates with the Veteran's potential nursing homes staff (often admissions or social services) and, at the time of the visit, utilize secure Facetime or VA Video Connect to conduct the tour of the nursing home from the patient's bedside while they are hospitalized. This is a collaboration between the GRECC, COIN and QUERI. It is funded as a COIN Shark Tank proposal internally (PI: Cari Levy), and supported by Dr. Cathy Battaglia (Triple Aim QUERI).

### **Main accomplishments for FY:**

In FY 19, 23 virtual tours have been conducted with 21 unique veterans. Virtual tours were provided at 8 nursing homes.

### **Evaluation Activities**

Focusing on feasibility of engaging veterans in virtual tours, satisfaction and acceptability for supporting veteran decision making related to nursing facilities.

### **Goals for current year**

Due to completion of funding and staffing changes, virtual tours are not currently planned for FY20.

**Awards, Leadership, and Distinctions:**

Cory Christiansen : Academic Leadership

Member, School of Medicine Faculty Promotion Committee, UCD

Jennifer Stevens-Lapsley : National Award / Recognition

American Physical Therapy Association (APTA) Marian Williams Research Award

Subbiah Pugazhenth: National Award / Recognition

VA Merit Award-3 cycles

Edward Melanson : Local Award / Recognition

Outstanding Mentor Award, Colorado Nutrition and Obesity Research Center (NORC)

Daniel Matlock : Academic Leadership

Director of Program for Patient Centered Decisions

Wendy Kohrt : Academic Leadership

Invited member of the NIDDK Clinical Obesity Research Panel (CORP)

Wendy Kohrt : Academic Leadership

Director of the Colorado Specialized Center for Research Excellence (SCORE) in Sex Differences and Women's Health

Wendy Kohrt : Academic Leadership

Chair of the Executive and Steering Committees for the NIH Common Fund Initiative on Molecular Transducers of Physical Activity (MoTrPAC)

Subbiah Pugazhenth: Academic Leadership

Reviewer-NIH-ETTN Study Section

Wendy Kohrt : Local VA Leadership

Associate Director of Research

Kerrie Moreau : Other Leadership

Director Cardiovascular Bio-Imaging Core

Cory Christiansen : Academic Leadership

Member, Scientific Advisory Committee for the Foundation of Physical therapy;  
Member DPT Program Advisory Committee for the University of Colorado; Member  
Rehabilitation Sciences Advisory Committee for the University of Colorado

Cory Christiansen : Academic Leadership

Member, DPT Program Advisory Committee, University of Colorado

Marian Betz: National Award / Recognition

Invited member of PREVENTS workgroup (Lethal Means)

Robert Schwartz : Local VA Leadership

GRECC Director/Service Chief

Kathryn Nearing : Local Award / Recognition

Selected to participate in the School of Medicine Women Leadership Program led by  
Judy Regensteiner

Kathryn Nearing : Local VA Leadership

Critical partner on all Eastern Colorado GRECC clinical demonstration projects (roles: conceptualization/design, evaluation, instrumentation, data collection and analysis, mentorship of trainees, dissemination)

Kathryn Nearing : Local VA Leadership

Selected to represent Eastern CO GRECC at GEC Leads Conference

Kathryn Nearing : Local VA Leadership

Co-I, Center for Innovative Rehabilitation of Aging Veterans with Severe Disability (submitted, not yet awarded)

Wendy Kohrt : National Award / Recognition

2019 American Physiological Society, Environmental and Exercise Physiology Section Honor Award (first woman to receive this award)

Kathryn Nearing : Academic Leadership

Led national evaluation of I-Corps@NCATS; presentation at 12th Annual Academy of Health Dissemination and Implementation Science Conference

Marc Cornier : Other Leadership

Medical Director, My New Weigh weight loss program, Anschutz Health and Wellness Center, 9/14-present

Marc Cornier : Other Leadership

Director, Advanced Lipid Disorders Clinic, University of Colorado Hospital, 7/19-

Marc Cornier : Other Leadership

Director, Lipoprotein Apheresis Program, University of Colorado Hospital, 1/14-

Marc Cornier : Academic Leadership

Associate Director, Obesity and Cardiovascular T32 Training Grant, University of Colorado Anschutz Medical Campus, 12/18-present

Marc Cornier : Academic Leadership

Director, Clinical Intervention Translation Core, Colorado Nutrition Obesity Research Center, 1/19-present

Marc Cornier : Academic Leadership

Associate Division Head, Division of Endocrinology, Metabolism and Diabetes, University of Colorado School of Medicine, 10/19-present

Marc Cornier : Academic Leadership

Associate Director of the Anschutz Health and Wellness Center, University of Colorado School of Medicine, 1/19-present;

Subbiah Pugazhenth: Local VA Leadership

IACUC member

Kathryn Nearing : Academic Leadership

Lead national workgroup to study influence of sex and gender considerations in research and the collective impact of SCORE

Marc Cornier : Other Leadership

Chair, Clinical Endocrinology Update Steering Committee, Endocrine Society, 11/18-present

Kathryn Nearing : Academic Leadership

Co-PI, R13 (NIH/NIA) Conference series focused on catalyzing innovation in Post-Acute and Long-term Care

Kathryn Nearing : National VA Leadership

Led effort to analyze national dataset characterizing Associated Health Training Programs; currently developing manuscript

Kathryn Nearing : National VA Leadership

Lead evaluator, GRECC Connect (national); invited to attend GRECC Connect Site Visit as lead of evaluation core

Kathryn Nearing : Local VA Leadership

Coordinate and facilitate Older Veteran Engagement Team (maintaining membership, schedule of presenters, tracking impact of team's input on research, clinical and community-based services for older Veterans and caregivers

Lauren Abbate: Local VA Leadership

Site Director, RMRVAMC Geriatric Emergency Department Accreditation Program

Lauren Abbate: Local VA Leadership

Medical Director RMRVAMC Gerofit Exercise Program

Russ Glasgow : Local Award / Recognition

Researcher of the year, Department of Family Medicine

Russ Glasgow : National Award / Recognition

Among top 1% most frequently cited social scientists- Clarivate

Kathryn Nearing : Other Leadership

Lead evaluator, Center for Public Health Practice, Colorado School of Public Health

## Performance Measures Report Card for Eastern Colorado, 2019

*The GRECC Performance Measures Committee establishes national standards, aimed at ensuring that GRECC activities contribute fully to local and national program goals. The 18 goals cover administrative, research, education, and clinical activities. This table lists the site's performance as well as the target.*

PERFORMANCE MEASURE	SITE	
	PERFORMANCE	TARGET
MOU with VISN and facility	Yes	Yes
Average # of funded research projects	2.1	1 or more
Average research expenditures per research FTE	\$520,608	>\$500,000
Average aging-related papers per professional core staff	3.8	2 or more
Average peer-reviewed papers by investigators	7.8	3 or more
Total papers by core staff	130	21 more
Percentage of papers listing GRECC affiliation	97%	95% or more
Number of CDA mentees	28	1 or more
Number of qualified training hours delivered by GRECC staff	2336	>1500
Number of innovative evaluation strategies	3	1 or more
Number of associated health disciplines	4	3 or more
Average scholarly presentations per professional core staff	5.4	4 or more
Number of clinical demonstration projects	8	2 or more
Number of clinical demonstration projects that were evaluated	4	1 or more
Number of clinical demonstration projects that were disseminated	1	1 or more
Average % time devoted to research by professional core staff	58%	>45%
Average % time devoted to education by professional core staff	15%	>10%
Average % Non-GRECC clinical time	2%	<20%