

CINDRR Circular

Center of Innovation on Disability and Rehabilitation Research

VA Health Services Research & Development

North Florida/South Georgia Veterans Health System, Gainesville FL James A. Haley Veterans' Hospital, Tampa FL

April 2016

CINDRR in the News

Safe Patient Handling and Mobility Conference

Background

In 1997, the National Institute of Occupational Safety & Health reported that forceful exertions, awkward postures, and repetitive motions associated with lifting, moving, and transporting patients significantly contributed to back injuries in nurses. As of 2013, nurses, nursing assistants, and orderlies still had some of the highest rates of musculoskeletal work-related injuries of any profession in the United States. The VA Safe



Patient Handling and Mobility (SPHM) program of research began in 1995 with an HSR&D study led by Audrey Nelson to redesign high-risk nursing tasks. In 1999, Dr. Nelson was awarded the VISN 8 Patient Safety Center of Inquiry, one of 4 US centers funded to study nursing injuries, leading to the VA-wide implementation of SPHM practices in 2008. In partnership with the VA Office of Public Health, a SPHM evaluation of this VA program found a 32% decrease in nurse injuries over a 3 year period.*

Because of its sustained work, the VA is recognized throughout the world as a leader in SPHM. In response to the VA's commitment to share research and innovations, two national conferences were initiated in 2001: the annual "Safe Patient Handling and Movement (SPHM) Conference" (now called "Safe Patient Handling and Mobility Conference") and the "Falls and Fall Injury Prevention Conference." In 2015, the conferences were combined into one highly respected international meeting with 30,000 sq. ft. of exhibit space and over

forty sessions of plenary, hands-on, breakout, and workshop sessions.

The conference faculty is nationally known for shaping healthcare delivery systems and approaches to improving patient safety with a focus on safe patient handling, mobility, and falls. Sessions include lessons learned, best practices, and cutting-edge research findings related to safety for patients at risk for mobility-related adverse events. This conference meets the needs of direct care providers, managers, administrators, risk managers, educators, industrial hygienists/safety professionals, and researchers from any discipline who are interested in advancing safety for patients and caregivers.

* Powell-Cope, G., Toyinbo, P., Patel, N., Rugs, D., Elnitsky, C., Hahm, B., Sutton, B., Campbell, R., Besterman-Dahan, K., Matz, M., & Hodgson, M. (2014). Effects of a National Safe Patient Handling Program on Caregiver Injury Incidence Rates. *Journal of Nursing Administration*, 44(10), 525-534.

Partnered Projects, Office of Rural Health

A Mobile Rehabilitation Clinic to Extend Physical Therapy Services to Community-Based Outreach Clinics, PI, Sam Phillips, PhD

To meet the needs of rural Veterans who have difficulty obtaining rehabilitative services, an RV which houses the mobile rehabilitation unit (MRU) clinic was modified with specialized rehabilitation equipment including a ceiling harness, specialized treadmill, wheelchair lift, and treatment area. Between December 2013 and December 2015, the MRU provided over 1,057 clinical encounters to 852 unique Veterans for essential services to



increase safety and mobility in their homes and around the community. The MRU focuses on falls prevention and increasing safe mobility by helping Veterans increase their strength and balance while using the equipment under the guidance of a VA clinician. A Veteran's primary care physician can request that the Veteran have access to the MRU at the closest CBOC to his/her home via a consult.

The MRU is parked in all CBOC's which lack rehabilitation therapy space. The unit goes to Brooksville, New Port Richey, and Lakeland CBOCs and may expand to other locations depending on the availability of funding. Currently, the project is funded through FY16. Through this project, Veterans saved an estimated 58,000 miles on the trips between their homes and the James A. Haley VA.

Surveys conducted as patients exited the MRU, found that 98.6% of those taking advantage of the MRU ranked their overall satisfaction with the clinic as "excellent" or "very good." Satisfaction and convenience, in addition to cost savings, suggest that the MRU is a feasible solution to increasing access to specialized rehabilitative care.

Photo of the MRU wheelchair lift is available on page 4

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Sergio Romero, PhD.

Assistant Director, Gainesville and Co-chair, Gainesville Mentoring Group

Dr. Romero is a Research Health Scientist at the HSR&D Center of Innovation on Disability and Rehabilitation Research (CINDRR) and a Research Assistant Professor in the Department of Occupational Therapy (OT), University of Florida (UF).

Dr. Romero received his PhD from the University of Florida in Rehabilitation Science, Movement Dysfunction track. Dr. Romero joined UF as a Charlotte Liberty Scholar from 2003 to 2005. One of his responsibilities was to design and develop a clinical database for patients attending the Geriatric Research, Education and Clinical Center (GRECC) Gait and Balance Clinic. Concurrently, Dr. Romero managed the research database for the IMPACT study, an evaluation study for stroke patients receiving constraint-induced movement therapy. In 2007, Dr. Romero was awarded a Rehabilitation Outcomes Research Center (RORC) Pre-doctoral Associated Health Rehabilitation Research Fellowship and in 2008, he became a Research Health Science Specialist with RORC, currently, CINDRR.

Since 2010, Dr. Romero has been a Research Assistant Professor in the OT department and a graduate faculty member in Rehabilitation Science. He teaches Applied Research in OT and Rehabilitation Science Theory and Applications. It is his teaching and mentoring experience that prompted him to take on the role of Mentoring Group co-chair, assisted by Dr. Charlie Jia. At each weekly meeting, the group reviews ongoing mentorship activities and discusses opportunities to assist anyone working on a difficult manuscript or research proposal. In

an open group discussion format, members provide/receive feedback on developing research ideas and building strong proposals.

Dr. Romero's current research focuses on interventions to increase independence and functioning in older adults and methods to improve the assessment of performance and patient reported outcomes. Specifically, Dr. Romero utilizes

modern test theory methodologies to develop, evaluate, and improve clinical/research outcome measures and patient reported outcome measures. He is particularly interested in rehabilitation outcomes in the fields of geriatrics and chronic diseases.

Dr. Romero's recent projects include Eyes behind the Video Camera: Partnering with Families for Home Safety, an RR&D SPiRE to explore the use of video cameras to evaluate home safety issues in lieu of an OT visit, Item Banking across the Continuum of Care, an HSR&D Merit project linking existing outcome measures to follow Veterans through the continuum of care, and an Office of Rural Health (ORH) project exploring opportunities to optimize the use of the electronic health record.

In his spare time, Dr. Romero is an avid gardener, both ornamental and vegetable, and enjoys time with his wife and two daughters. He also loves to build things, from a customized computer to a sunroom home addition.



Caregiver depression and burden are common following a family member's stroke and are major contributors to stroke survivors' functional recovery, resource use, and institutionalization. Dr. Constance Uphold has extensive experience in caregiver education, including the development of the RESCUE Stroke Caregiver Website (www.cidrr8.research.va.gov/rescue), a nationally-available site which houses educational materials and resources for stroke caregivers.

Dr. Uphold's RR&D funded Small Projects in Rehabilitation Research (SPiRE) pilot study is titled "Internet and Telephone Support Intervention for Stroke Caregivers" and builds on a previous T21 clinical demonstration project. The study aims to test a problem-solving intervention that uses telephone support and the RESCUE website to improve the quality of caregiving and the rehabilitation of Veterans following a stroke. The study explores the impact of 4 and 8-session internet and telephone support interventions on stroke caregiver and Veteran outcomes compared to attention control and standard of care. Caregiver outcomes of interest are depression, problem-solving abilities, self-efficacy, burden, and general health; Veteran outcomes are functional abilities and healthcare utilization.

The study is currently enrolling 48 caregivers of Veterans who receive care in the NF/SG area of VISN8 and who have had a stroke in the last 2.5 years. The intervention is based on a relational/problem-solving model of stress reduction, originally developed by D-Zurilla and Nezu, and includes



From left: PI, Connie Uphold, Elizabeth Fehlberg, Maggie Freytes, Christa Dizon, Rachael Hugon, Rachel Graf, Nate Eliazar-Macke, Jennifer LeLaurin, Jason Rogers, Magda Schmitzberger

web-based educational training using factsheets and tools available on the RESCUE Stroke Caregiver Website. Two follow-up assessments are collected: one short-term (following the intervention sessions) and one long-term (4 months) assessment. The 48 caregivers are randomized into four groups: 1) a 4-session intervention group; 2) an 8-session intervention group; 3) an attention control group (discussion of caregiving experiences but no training or guidance from the nurse); and 4) a standard care group.

The weekly problem-solving and skill building intervention and attention control sessions are conducted over the telephone by registered nurses Rachael Hugon and Elizabeth Fehlberg. Data collection is performed by trained research assistants, typically undergraduate and graduate students from the University of Florida. Finally, qualitative interviews are conducted with 18 participants to obtain in-depth perceptions of the credibility of nurses and the value, facilitators, and barriers of the intervention and attention control sessions.

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Mentorship Highlight, NIDILRR Fellow Welcome Michelle Henry, PhD



Michelle Henry, PhD, has recently accepted the Advanced Rehabilitation Research Training Program (ARRTP) fellowship funded by the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR). This collaboration between the University of Florida, NIDILRR, and CINDRR enables 2 fellows during each fellowship period of two years, to increase their knowledge of disability policy, obtain research and career mentoring from senior CINDRR investigators, and provides the

experience to pursue a research career within the VA.

Dr. Henry received her master's in Special Education with a concentration in Curriculum and Instruction of Urban Gifted from the University of South Florida. She received her doctorate from the University of South Florida in the fall of 2014 with an emphasis in Disability Policy. After graduation, Dr. Henry worked to complete publications on disability policy. Specifically, she analyzed hearing officer decisions related to disputes about what is considered an appropriate educational accommodation and service for people with disabilities.

Although Dr. Henry spent several years as an elementary teacher in the Hillsborough County school system, she decided to pursue disability policy because she believes that policies can be designed to either hinder or advance people with disabilities. She believes in critically examining disability policy as a means of improving rehabilitation outcomes.

Her primary research goals center on policies related to rehabilitation and expanding interventions for Veterans with traumatic brain injury (TBI) and post-traumatic stress disorder (PTSD) in community living centers. Her research interest is in the area of disability policy related to access and accountability such as the Veterans Access to Care Act of 2014. She will research cost benefits, adjudication, satisfaction, and virtual care as they pertain to VA community living facilities. She is also interested in bridging pedagogy, policy, and practice in special education residential rehabilitation placements and Veterans with traumatic brain and spinal cord injuries in community living centers. She believes that working with Veterans with disabilities, we can find new ways through research to maximize rehabilitative outcomes.

While at CINDRR, her research priorities are to examine policies related to Veterans residing in community living centers (CLC) versus those in VA nursing homes. She hopes to be ready to compare the care that Veterans with traumatic brain or spinal cord injuries receive in VA nursing homes with the care they receive in the CLC. She is interested in comparing number of clinician visits, occupational and physical therapy, and standard of care.

She will take courses, as required by the fellowship, at the University of Florida, Harvard EDx, and/or the University of South Florida in qualitative and quantitative research methods and rehabilitation policy. She is currently preparing her dissertation for publication in peer-reviewed journals.

In her spare time, she volunteers in the community helping people with disabilities to advocate for themselves and teaching children to read. For fun, Michelle enjoys exploring new and unique restaurants, especially, Chinese, her favorite.

CINDRR Investigators' Recent Publications, Presentations, and Awards

Selected as March 2016 HSR&D Publication Brief: Jia H, Pei Q, Sullivan C, et al. <u>Post-Stroke Rehabilitation and Restorative Care Utilization: A Comparison between VA Community Living Centers and VA-Contracted Community Nursing Homes</u>. *Medical Care*. March 2016;54(3):235-242. FINDINGS:

Compared with Veterans residing at contracted community nursing homes (CNHs), Veterans residing at VA community living centers (CLCs) had fewer average rehabilitation therapy days (both adjusted and unadjusted), but were significantly more likely to receive restorative nursing care. For rehabilitation therapy, Veterans in CLCs had lower user rates (75% vs. 76%) and fewer observed therapy days (4.9 vs. 6.4) compared to Veterans in CNHs. For restorative nursing care, Veterans in CLCs had higher user rates (34% vs. 31%), more observed average care days (9.4 vs. 5.9), and more adjusted days for restorative nursing care.

Latricia Allen, MD, CINDRR Patient Safety Fellow, was chosen to serve on the Office of Academic Affiliations Advanced Fellows National Workgroup to develop a national curriculum for advanced fellowships. http://www.va.gov/oaa/specialfellows/

Kiersten Downs, CINDRR Research Associate and doctoral candidate, University of South Florida, was chosen to join the Student Veterans of America Board of Directors. http://studentveterans.org/index.php/aboutus/board-of-directors-list

Cowan, Linda J., Agreement between Braden Nutrition Subscale and VA Nutrition Classification Scheme Related to Pressure Ulcer Risk in Acute Care Settings, poster at Clinical Advisor Summit Orlando, FL April 7- 9, 2016.

Struckmeyer, L.R. & Pickens N.D. (2016). Home Modifications for People with Alzheimer's Disease: A Scoping Review, *American Journal of Occupational Therapy*, 70, 7001270020p1-7001270020p9. doi:10.5014/ajot.2016.015768

Towns, S. J., Silva, M. A., & Belanger, H. G. (2015). Subjective Sleep Quality and Postconcussion Symptoms Following Mild Traumatic Brain Injury. *Brain Injury*, 29(11), 1337–41. PMID 26288022.

LePage, J., Ottomanelli, L., Njoh, E., & Barnett, S. (2015). Spinal Cord Injury Combined with Felony History Effect on Supported Employment for Veterans. *Journal of Rehabilitation Research and Development*, 51(10), 1497–1805.

CENTER OF INNOVATION ON DISABILITY AND REHABILITATION RESEARCH (CINDRR)

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CINDRR is a multi-institutional research center at the North Florida/South Georgia Veterans Health System, Gainesville, FL and the James A. Haley Veterans' Hospital and Clinics, Tampa, FL. Scientists at this Veterans Health Administration Center of Innovation conduct research to develop strategies to improve, for Veterans of all ages, inpatient and outpatient rehabilitation services and long-term management of disability, including issues that impact family members.



http://www.cindrr.research.va.gov



Upcoming Conference... 2016 Safe Patient Handling and Mobility Conference

with special emphasis on falls, fall injury, and pressure ulcer prevention. When: April 11-15, 2016 Where: Renaissance Hotel, Glendale AZ. Who: Nurses, Physical/Occupational/Kinesio-therapists, Risk Managers, & Physicians † Contact Valerie.Kelleher@va.gov for information

Research in Progress....Tampa

The VA Traumatic Brain Injury Model Systems (TBIMS) project is expanding to study important aspects of chronic TBI health care. A new sub-study, "Improved Understanding of Medical and Psychological Needs in Veterans and Service Members with TBI" (I-MaP), will examine (1) long-term physical and mental health effects, (2) impact of comorbid health conditions on recovery, and (3) chronic rehabilitation needs, including accessibility of needed services.

I-MaP is utilizing the infrastructure of the VA TBIMS which has 60 newly enrolled Veterans and service members with TBI for lifetime follow-up across the five Polytrauma Rehabilitation Centers (Tampa, Richmond, Minneapolis, Palo Alto, San Antonio). The TBIMS/IMaP project expansion was made possible through collaboration and funding from the Defense and Veterans Brain Injury Center in the Department of Defense, Veterans Affairs, and National Institute on Independent Living, Disability and Rehabilitation Research.

To learn more, please see a Special Section edited by Risa Nakase-Richardson, on the topic of sleep and Traumatic Brain Injury in the March issue of the *Journal of Head Trauma and Rehabilitation*.





A Finished Sheet of Paper

Combat Paper

Through papermaking workshops, Veterans use their uniforms worn in service to create works of art. The uniforms are cut up, beaten into a pulp and formed into sheets of paper. Participants use the transformative process of papermaking to reclaim their uniforms as art and express their experiences with the military. "The story of the fiber, the blood, sweat and tears, the months of hardship and brutal violence are held within those old uniforms." Drew Cameron www.combatpaper.org

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The study is nearing completion as study staff enroll 5 more caregivers by the end of March and complete the follow-up data collection by October.

Dr. Uphold's HSR&D Merit project, "Utilizing the RESCUE Stroke Caregiver Website to Enhance Discharge Planning," which is currently enrolling stroke caregivers in Gainesville, Miami, and Tampa, builds on the work of this pilot study in a continued effort to implement caregiver programs that involve low-cost, evidence based interventions that can be sustained in routine clinical practice. However, in this second study, the intervention is primarily conducted over a messaging center allowing the caregivers to proceed at their own pace which may be more convenient for caregivers.