



# 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

July 2017

## CINDRR in the News

### 18th Annual Safe Patient Handling and Mobility Conference, April 10 -14, 2017



Conference attendees working with a facilitator during a hands-on training class. They are utilizing a bed that can lift the patient to a standing position and then using a floor-based lift to transfer them from the bed safely without manual lifting.

#### Reaching for Excellence in Safe Patient Handling and Mobility

Injuries due to lifting, transferring, and providing physical assistance to patients are the leading causes of musculoskeletal injuries among healthcare workers, particularly nurses, nursing assistants, and first responders. These injuries result in lost work days, pain, suffering, loss of these workers to the workforce, and a significant resource burden to the industry. The success of ergonomics-based Safe Patient Handling and Mobility (SPHM) programs, which have evolved since the mid-1990s, is a function of the capabilities of the patient, the patient care task being performed, access to the appropriate patient handling equipment, the physical environment, and the organizational context (e.g., culture of safety).

SPHM is inextricably linked to patient safety through a common vision of a culture of safety. SPHM decreases the incidence and severity of musculoskeletal injuries to direct care providers caused by providing mobility assistance to patients. SPHM safely improves patient mobility, improving function and decreasing the risk of complications associated with immobility in hospitalized patients such as pneumonia, thrombophlebitis, constipation, urinary stasis, and delirium. SPHM Programs have been shown to provide a return on investment in 3 to 5 years from the initial capital outlay for patient handling equipment, by decreasing worker compensation costs and lost work days.

The 18th Annual Safe Patient Handling and Mobility Conference: Reaching for Excellence in Safe Patient Handling and Mobility--Implementing Culture Change with Special Emphasis on Falls, Pressure Ulcers and Mobility was held April 10-14, 2017. The conference is sponsored by the Tampa VA Research and Education

Foundation, Inc. (TVAREF), a non-profit organization established to advance research and education missions of the Department of Veterans Affairs at The James A. Haley VA Healthcare System and other VA entities in the region. There were 350 attendees including nurses, physical therapists,

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## CINDRR in the News

### Symposium on Advanced Wound Care (SAWC), April 5-9, 2017

The Symposium on Advanced Wound Care (SAWC) Conference is a national conference with international attendees from every medical profession. At this year's Spring conference in San Diego, CA, Linda Cowan, PhD, ARNP, FNP-BC, CWS, seated center in photo below, helped organize a VA specific Networking Meeting. Attendees at the Networking Meeting are pictured below. The Association for the Advancement of Wound Care (AAWC) hopes to make the VA Networking Meeting a regular event at the wound care conference. The SAWC Fall conference is held October 20-22, 2017, in Las Vegas, NV and next year's Spring conference will be held April 25-29, 2018, in Charlotte, NC.

The 2017 conference was especially memorable for Dr. Cowan, since she received the "Distinguished Member Award" during the SAWC.

Dr. Cowan was also recognized for her participation on the AAWC Board of Directors (Research Board Member) and as Co-Chair of the Research Task Force from 2013-2017, with the receipt of a plaque presented at the AAWC membership meeting. Dr. Cowan stepped down from the AAWC Board of Directors to accept the position of Co-Chair with Dr. Aimee Garcia, Houston VA, to lead the International Consolidated Pressure Ulcer Guideline (ICPUG) Task Force.

Dr. Cowan has recently relocated to the TAMPA CINDRR site to become the Associate Chief of Nursing Service/Research (ACNSR) for CINDRR at the James A. Haley Veterans' Hospital in Tampa, Florida. The position will be 50% research (continuing her wound, ostomy, and pressure ulcer prevention research) and 50% working with Dr. Tatjana Bulat focusing on the Patient Safety Center of Inquiry (PSCI). The Tampa PSCI is well known for their work in safe patient handling and mobility (SPHM), especially falls and fall injury prevention, and plans to add pressure injury prevention to the portfolio.



Attendees of the VA Networking Meeting, 2017 SAWC Conference.

## CINDRR in Photos

### Research Day, May 19, 2017, Malcom Randall VAMC and May 24, 2017, James A. Haley VA Hospital



Sandra Winter, PhD, OTR/L, presenting her *Driving Intervention for Returning Combat Veterans* project results at the Malcom Randall VAMC, Gainesville, FL Research Day.

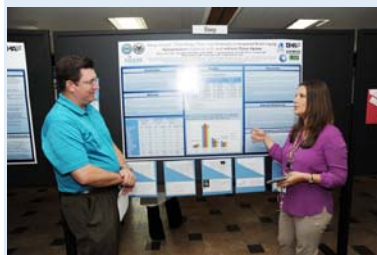
Racine Brown, PhD and the teams' poster, *Incidence and Trajectory of Obesity in Veterans and Service Members with TBI: A VA Model Systems Study*, JAH, Tampa, FL.

The poster presents results from an analysis of factors associated with the increase in BMI in Veterans with chronic TBI.



Lelia Barks, PhD, ARNP, with her study team's poster, *Wheelchair Seated Posture and Health Outcomes in Veterans*, JAH, Tampa, FL.

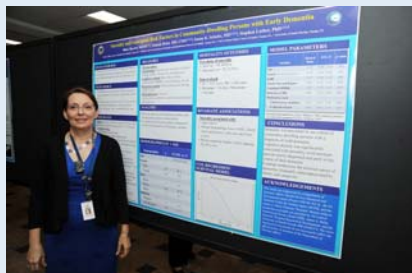
Wheelchair fit affects posture which affects seat pressure and pain or discomfort.



Risa Nakase-Richardson, PhD, FACRM, discusses her project poster, *Sleep Stages, Total Sleep Time, and Arousals in Acquired Brain Injury Rehabilitation Patients with and without Sleep Apnea*, JAH, Tampa, FL.

One in two Polytrauma TBI patients have untreated sleep apnea which impacts the neurorestorative properties of sleep.

Tatjana Bulat, MD, CMD, and her teams' poster, *Mortality and Associated Risk Factors in Community-Dwelling Persons with Early Dementia*, JAH, Tampa, FL



Christina Dillahunt-Aspillaga, PhD, with her teams' poster, *Predictors of Employment Outcomes in Veterans with Traumatic Brain Injury: A VA Traumatic Brain Injury Model Systems Study*, JAH, Tampa, FL.

This poster examined the length of time to return to work (RTW) for service members & Veterans (SM/V) with traumatic brain injury (TBI) and to identify variables predictive of RTW.



## CINDRR Continuing Veteran Initiatives

### Veteran Engagement Council, Recent VEC Meetings

The purpose of the CINDRR Veteran Engagement Council (VEC) is to improve rehabilitation research through a trusted partnership among Veterans' communities and CINDRR investigators. VEC members provide individual viewpoints and non-consensus advice to provide assistance in making CINDRR projects and research ideas more Veteran-centric. CINDRR researchers volunteer to present their research at the monthly VEC meetings.

At the April 19th meeting, Dr. Gail Powell-Cope presented an overview of CINDRR projects. Research topics suggested by VEC members included a need for research on lower functioning Veterans and smaller populations such as Veterans with severe brain injuries, families taking care of injured or ill Veterans and how important the family is to reintegration, and gaps in care during the DoD VA transition. VEC members discussed the difference in culture between the VHA and Vet Centers; VEC members related that their experiences with the Vet Centers are more positive and that the atmosphere and approach to mental health care at Vet Centers are much different than at the VA.

At the May 17th meeting, Dr. Jolie Haun presented information on her Mission Reconnect proposal. Dr. Haun's presentation provided questions for the VEC members, for example:

- What do Complementary and Integrative Health or Complementary and Alternative Medicine mean to you?
- Have you used any non-medicinal methods of pain, stress and/or anxiety relief in the past? Currently?
- If the VA offered you non-medicinal methods of pain, stress and/or anxiety relief, would you be interested in having access to these at home?
- Would you want to participate with a partner, such as, spouse, life partner, or adult child?

The project was well received and VEC members appreciated that Dr. Haun included both physical and psychosocial outcomes in her presentation. One VEC member stated "the very idea that the VA is even considering alternative integrative approaches gives me great hope that the VA is realizing that it is time for new opportunities to come forth." VEC members engaged in an interesting conversation about a more diversified approach to the recruitment process and dissemination of findings which resulted in a boilerplate letter of support from the VEC for recruitment and dissemination.

At the June 21st meeting, Kiersten Downs presented her dissertation research, titled "Beautifully Awful"—Women Veterans Experiences with Transition from Military Service." The points of discussion during the meeting were the most pressing issues facing women Veterans, the kind of research that women Veterans would like to see, how the VA can improve the experience of women receiving services from the VA, and building trust with women Veterans.



Dr. Jolie Haun presenting to the VEC on May 17, 2017

## CINDRR New Research, Gainesville

### Nursing Unit Design and Hospital Falls, Ronald Shorr, MD, PI

Patient falls are the most common adverse events reported in hospitals. Each year, roughly one million patient falls occur in United States (US) hospitals, resulting in over 250,000 injuries and 11,000 deaths. Patient falls cost hospitals due to increased lengths of stay, health care expenditures, and litigation. As of March 2015, the Department of Veterans Affairs (VA) National Center for Patient Safety (NCPS) Patient Safety Information System, a confidential and non-punitive reporting system, showed that falls were the most frequently reported category of patient harm across the VA system of care.

Although it is well understood that the physical hospital environment contributes to nearly 40% of severe or fatal hospital falls, there are significant gaps in our knowledge about the relationship between inpatient unit design and fall rates. The few studies that have examined unit design have been conducted in a single hospital or a small number of inpatient units, limiting generalizability. Furthermore, there have been no studies focused on unit design and falls in VA

medical centers (VAMCs).

Nursing Unit Design and Hospital Falls, a recently approved HSR&D Merit project, uses a mixed methods framework to investigate factors associated with falls in 12 VA medical/surgical units in Malcom Randall VAMC, Lake City VAH, and James A. Haley VAH. The project uses a qualitative approach to investigate staff and management perceptions and experience with unit design factors that contribute to patient falls. In the quantitative portion of the project, study, data analysis will identify 50 units that are high (25) and low (25) variants in terms of risk-adjusted fall rates. Using digitized floor plans and data from an environmental inventory of these units, the team will use innovative spatial network analyses to measure several design factors that characterize the units. Using both qualitative and quantitative data and a facility survey will highlight previously uninvestigated low fall rate unit characteristics.



Ronald Shorr, MD

## Recent CINDRR Publications and Presentations

Latricia Allen, DPM, MPH, FACFOAM; Gail Powell-Cope, PhD, ARNP, FAAN; Alfred Mbah, PhD; Tatjana Bulat, MD, CMD; and Eni Njoh, MPH (2017). A Retrospective Review of Adverse Events Related to Diabetic Foot Ulcers, *Ostomy Wound Management* 2017;63(6):30. <http://www.o-wm.com/article/retrospective-review-adverse-events-related-diabetic-foot-ulcers>

Graf, R., LeLaurin, J., Schmitzberger, M., Freytes, I.M., Orozco, T., Dang, S., & Uphold, C.R. (2017). The Stroke Caregiving Trajectory in Relation to Caregiver Depressive Symptoms, Burden, and Intervention Outcomes, *Topics in Stroke Rehabilitation*. <http://dx.doi.org/10.1080/10749357.2017.1338371>

Shahnaz Sultan, Melissa R Partin, Phalagoon Shah, Jennifer LeLaurin, Ivette Magaly Freytes, Chandylene L Nightingale, Susan F Fesperman, Barbara A Curbow, and Rebecca J Beyth, (2017). Barriers and Facilitators Associated with Colonoscopy Completion in Individuals with Multiple Chronic Conditions: A Qualitative Study, *Patient Preference and Adherence*. 2017:11 985-994.

Sergio Romero, Mi Jung Lee, Ivana Simic, Charles Levy, and Jon Sanford (2017). Development and Validation of a Remote Home Safety Protocol, *Journal of Disability and Rehabilitation: Assistive Technology*. Pages 1-7 | Published online: 22 Mar 2017. <http://www.tandfonline.com/doi/full/10.1080/17483107.2017.1300345>

Dillahunt-Aspillaga C, Pugh MJ, Cotner BA, Silva MA, Haskin A, Tang X, Saylor ME, Nakase- Richardson R. (2017). Employment Stability in Veterans and Service Members with Traumatic Brain Injury: A VA Traumatic Brain Injury Model Systems Study, *Archives of Physical Medicine and Rehabilitation*, doi: 10.1016/j.apmr.2017.05.012.

Cotner, B. A., Ottomanelli, L., O'Connor, D. R., & Trainor, J. T. (2017). Strategies to Address Provider-identified Barriers and Facilitators to Implementing a Supported Employment Program in Spinal Cord Injury Centers. *Disability and Rehabilitation*. <http://dx.doi.org/10.1080/09638288.2017.1294209>

occupational therapists, LPNs, engineers, and other specialists in the areas of safe patient handling and falls. The latest technologies were exhibited in the hotel's 30,000 sq. ft. event center. Over 70 vendors showcased technology and cutting edge solutions to provide the best patient care and the safest options for clinicians from all disciplines.

The main program opened with a keynote presentation by Pam Cipriano, PhD, RN, FAAN, President of the American Nurses Association (ANA), who related SPHM into the framework of the ANA's 2017 Year of the Healthy Nurse Initiative. Educational sessions included plenary, concurrent, and hands-on sessions. There was a full-day offering of pre-conferences and post conferences but yet, the end of the 10 hour days still found attendees working on solutions to questions posed during the meeting.

Dr. Powell-Cope notes that "the attendees, faculty, exhibitors, and staff give the conference an "electricity" (a description shared by many outside observers of our group at the venue) that is hard to find elsewhere. This is a very specialized group of people who are interested in learning about issues and solutions and who come back, year after year, to share their successes (and failures), and to give and get answers to questions that arise throughout the average day in the wide world of healthcare. They are there to support each other and strive toward a goal of universal safe patient handling and mobility, making healthcare safer for healthcare workers and for patients."

2017 sponsors included the American Nurses Association, the Association of Safe Patient Handling Professionals (ASPHP); the International Journal of Safe Patient Handling and Mobility; AON; and the Centers for Disease Control/National Institute for Occupational Safety and Health (NIOSH). The sponsors offer not only financial support to offset the costs of the conference, but also help with advertising and marketing the conference throughout the year and sponsoring faculty.



From left: Pam Cipriano, PhD, RN, NEA-BC, FAAN, president of the American Nurses Association, and Gail Powell-Cope, PhD, ARNP, FAAN, CINDRR

# CENTER OF INNOVATION ON DISABILITY AND REHABILITATION RESEARCH (CINDRR)

Co-Directors: Gail Powell-Cope, PhD, ARNP, FAAN, (Tampa) and Diane Cowper Ripley, PhD, (Gainesville-Acting)  
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Tampa Assistant Director: Stephen Luther, PhD  
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Gainesville Assistant Director: Sergio Romero, PhD

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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 **inform rehabilitation practice and policy for Veterans through rigorous interdisciplinary research.**

CINDRR's scientific mission is **threefold**: **1)** to conduct leading edge studies on the access, utilization, quality, cost, delivery, and health and systems outcomes of rehabilitation services; **2)** to spearhead the implementation and dissemination of the most promising evidence-based rehabilitation practices; and **3)** to train future generations of rehabilitation research scientists.



## Upcoming Conference... 2018 18th Annual Safe Patient Handling and Mobility Conference

**Innovations, Partnerships, and Coalitions to Make the Needle Jump** Featuring strategies to achieve culture change for **staff and patient safety.**

**When:** April 16-20, 2018 **Where:** Rosen Centre, Orlando FL. **Audience:** Nurses, Physical/Occupational/Kinesio Therapists, Risk Managers, Physicians, Vendors, Hospital Leaders, Worker's Comp, Labor Partners, Insurers <http://www.tampavaref.org/conferences.htm> **More information, contact:** Valerie.Kelleher@va.gov

### NF/SGVHS Research Day Keynote Speaker,

**Jerry Majetich, Staff Sergeant, U.S. Army, retired**



Staff Sergeant Majetich U.S. Army, retired

Staff Sergeant Majetich gave a special presentation at the North Florida/South Georgia Veterans Health System Research Day program. He recounted his experiences in Iraq in 2005, when the vehicle in which he was riding was struck with an IED. He received 35% total body surface burns, 100% face and scalp burns, the loss of both ears and a portion of his nose, and complete amputation of several fingers. As a result of his injury, he lost 1/3 of his small intestine and 1/4 of his stomach.

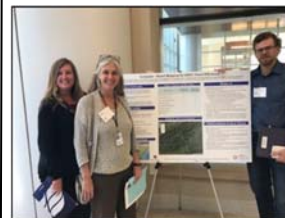
While recuperating in the hospital, he was presented with the Purple Heart from President George W. Bush. To date, Sgt. Majetich has undergone 73 surgeries in VA hospitals throughout the US, but has continued to keep both his sense of humor and his optimism.

Once Sgt. Majetich had overcome the physical and emotional challenges that his injuries presented, he wanted to find a job. He explained that he felt so helpless sitting at home and he wanted to be able to provide for his family. In 2007, Sgt. Majetich worked with the Wounded Warrior program until he needed to undergo additional surgeries. He continued to help other transitioning Veterans as a representative of the Wall Street Warfighters program and has served as a spokesperson for the Coalition to Salute America's Heroes.

Sgt. Majetich has been a Vice President of Business Development for Drexel Hamilton since 2011. Drexel Hamilton is a Service Disabled Veteran Owned and Operated Broker Dealer, investment banking firm founded by Lawrence Doll who is a two time Purple Heart recipient from his service in Vietnam.

### CINDRR Poster Wins 2nd Place, Geriatric and Extended Care Conference, Orlando VA, April 6-7, 2017

*Geographic Information System (GIS) mapping for Home-Based Primary Care (HBPC)* is a Mentored Partnership project of the VA Geriatrics and Extended Care (GEC) Strategic and Transformational Initiatives. Authors for this award winning poster include: Sarah Tubbesing, MD, MSc (PI), Jackie Fickel, PhD, Michael Ong, MD, PhD, Alicia Bergman, PhD, and Judith Katzburg, PhD (VA Greater Los Angeles HBPC and CSHIIP), Diane Cowper Ripley, PhD, Jason Lind, PhD, and Bridget Cotner, PhD (CINDRR), Richard Leatherman, MSW (Asheville HBPC), and Marguerite Fleming, MPA (Office of Information & Analytics/Field Base Analytics).



Bridget Cotner, PhD, Jackie Fickel, PhD, and Jason Lind, PhD, with the team's 2nd place poster for "best poster"

The project uses a multi-disciplinary implementation approach to work with HBPC partner sites that are learning and using GIS mapping for practice management. The mixed-method, site-level evaluation uses utilization and survey data, and data from semi-structured interviews to assess extent of adoption, satisfaction, facilitators and barriers, and to explore impacts. Formative evaluation feedback from partner sites is used to refine implementation tools and processes, resulting in development of a set of tools that includes training and technical support materials, which are available for future implementation support through regular program structures.

Implementation has spread from a single site (FY2012), to 21 sites (FY2016) (see Figure 1). Sites represent small, medium, and large HBPC practices in urban and rural geographic areas nationwide. By January 2017, 16 sites were using maps that they had made; the other 5 sites were still in the planning or training process. The most common uses included assigning patients to providers (n=15; 94% of map users), managing territories and day-to-day travel (n=10; 63%), and emergency preparedness (n=8; 50%).



Figure 1. Map of 21 Sites

One site used GIS maps to optimize patient reassignments in an expanded clinical service area, in conjunction with staffing reduction. Nurse practitioners subsequently saw more patients and traveled fewer miles; one clinician experienced a 34% reduction in miles/month (Q4 2015: 1262, Q4 2016: 828) after GIS implementation. HBPC programs can learn to use GIS maps given adequate staff skills, training, and time.