

THE GRECC FORUM ON AGING

GERIATRIC RESEARCH, EDUCATION & CLINICAL CENTER

GRECCs in the News

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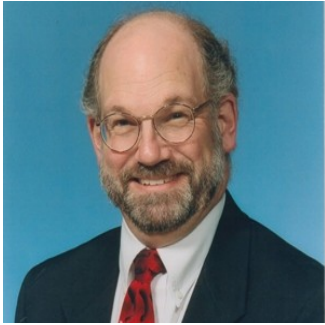
New England GRECC National attention was focused on Alzheimer's disease with the Emmy winning HBO documentary, "The Alzheimer's Project". The series was promoted by Maria Shriver, First Lady of California, and daughter of Sargent Shriver who suffers from Alzheimer's disease. Other news media outlets contributed numerous companion articles and videos, including ABCNews.com, which reported on a study being conducted at the New England GRECC, "Clinical Trial of a Home Safety Intervention for Alzheimer's Disease". Principal investigator, Kathy J. Horvath, PhD, RN was interviewed for the written articles and Project Director, Scott A. Trudeau, PhD, OTR/L, was videotaped demonstrating 5 home safety tips for a person with memory loss.

This program of research, funded by the VA Health Services Research and Development, focuses on the high frequency and high severity risks for accidents in the home of a person with Alzheimer's disease. The current study is supported by Bedford VA Hospital and VA Boston Health System. Through home visits, post-intervention evaluations, and interviews with families, the investigators have identified the most important and practical modifications that can be made in the home - often with low-cost items that can be purchased

at any hardware store. The article and video aired on ABCNews.com. A portion of this video was picked up and included in a health segment with Dr. Timothy Johnson on the Good Morning America Show which aired nationally.

At the same time, the VA ORD Communications office featured an article on their work in the June/July issue of Research Currents. Readers of this article were directed to a web-based slideshow that the New England GRECC developed in collaboration with Mitch Mirkin at VA ORD Communications. The slide show features a step-by-step makeover at the home of Donald Cameron, a Navy Veteran who was diagnosed with Alzheimer's disease in 2006. This program of research was also referenced in an article by Dr. Joel Kuipersmith in the September 2009 issue of The American Legion Magazine, as one of VA's many efforts to support caregivers. All of this recognition has been very affirming, showing an appreciation that we are, in fact, addressing issues of immediate importance within the VA and beyond.

For more information about this home safety research, and for links to the archived audio and slide slows, please contact Kathy.Horvath@va.gov or Scott.Trudeau@va.gov.



More on the Three-Legged Stool — Literally

Ken Shay, DDS, MS

A couple years ago, my contribution to [Forum on Aging](#) began by stating that a GRECC is like a three-legged stool, with each of the three legs—research, education, and clinical innovation—essential to the overall functioning of the whole. The following is going to finish the story by discussing a part of the stool that seldom gets mentioned when this metaphor is employed. I'm talking about the seat, which is, after all, the whole reason for the existence of the three legs.

GRECC's original mission, and its key underpinning today, 35 years later, is advocacy. The GRECC is a sum that is greater than its parts, giving it license and capability to be an agent of change and leadership. Its role as a leader and change agent is defined by the skills and interests of the Director and the rest of the leadership team. It can exist solely to preserve its own agenda and interests. It can act as a representative of its academic affiliate. Or it can make more selfless use of its position by serving as an advocate for clinical geriatrics, for extended care, for research, for staff education, for post-graduate health-discipline training,

or for many other possible constituencies.

GRECCs do an excellent job of the third option: advocating for programs, people, and activities that are key not only to the GRECC, but also to the host VA, VISN, and VHA. In so doing, they make indelible and important marks that can be seen throughout VA. GRECC Directors and Associate Directors sit and hold positions on Clinical Executive Boards, Executive Leadership Councils, and Professional Standards Boards. They are on Ethics Committees, Education Committees, VA and VISN Geriatrics and Extended Care Councils, Performance Improvement Teams, Research and Development Committees, Human Subjects Committees and Institutional Review Boards.

It is through these administrative duties and the GRECC personnel involved with them that each GRECC gains visibility among other principals in the organization and recognition for being an important participant in and contributor to the programs of the parent VAMC and the host VISN. These councils and committees are also where new opportunities for promising projects are identified, key professional alliances are established, and impactful news about VA is shared. Few participants in such groups look forward to the actual meetings, but most recognize that participating and contributing is a leadership obligation—someone has to do it—that carries with it the benefits conferred by being part of the team. Those who are recognized as giving will in time get their due; those who expect the

system to treat them fairly but withhold participation until it suits their own interests, risk marginalization.

To its own end, the GRECC's participation on VAMC and VISN committees ensures the GRECC's interests are represented when issues are debated and decisions are made. Those interests are quite diverse and can include research space, equipment, clinic slots, renovations, leadership and personnel changes, data access, IT support, and countless others. But the GRECC's presence, regardless of setting, means that the needs of older Veterans will be on the table at all times, whether the discussion concerns clinical, administrative, educational, research, personnel, or policy matters.

The single most important role of a GRECC—the seat of the three-legged stool—is to make sure that the needs of older Veterans are brought to the table whenever possible. This is the justification for the GRECC's very existence, for its research activities, its educational efforts and its clinical innovations. Most GRECCs recognize that their existence, to say nothing of their flourishing, is strongly impacted by their image in the eyes of facility and network leadership—and that this in turn is dependent on contributions to the health system's overall function, as judged by the system's criteria.

It is by attending to the fulfillment of non-GRECC concerns that GRECCs gain the means for advancing their own agendas, and thereby for fulfilling their core mission of advocacy for programs and services for frail older Veterans.

The Geriatric Scholars Program

The GRECCs are preparing primary care providers who work in rural Community-Based Outpatient Clinics (CBOC's) to manage care for older Veterans through an innovative educational outreach program. The VA has established over 330 CBOCs), to serve the 40% of Veterans who live in rural or highly rural areas. As the Institute of Medicine report, "Retooling for an Aging America," noted, older adults in rural areas are more likely to be in poor health and have higher rates of chronic illness, disability, and mortality than elders in urban areas – yet recruitment and retention of specialists with geriatric training to rural areas is challenging.

The Office of Geriatrics and Extended Care and the GRECC system have developed an educational program for primary care providers who work in these rural CBOC's, to enhance skills in geriatrics and to improve health outcomes for older

Veterans.

The Geriatric Scholars Program consists of mandatory and elective educational opportunities that are tailored to the individual needs of primary care clinicians. The program offers intensive training in geriatric medicine and quality improvement, as well as optional clinical practice and educational programs to enhance learning in specific subject areas.

Each Geriatric Scholar is expected to undertake personal practice change projects as well as lead a local quality improvement project. Many of these projects will be highlighted at the Geriatric Leads Conference in June 2010. The program was funded by the Office of Rural Health and the educational program and all travel costs are provided at no charge to the participants. Each VISN was invited to select participants and 19 VISNs are participating in the pro-

gram.

The Geriatric Scholars Program is a collaboration of the GRECC's at Bronx, Boston, Greater Los Angeles, Little Rock, Palo Alto, St. Louis, San Antonio and Tennessee Valley. The program hub is located at the Greater Los Angeles GRECC. Each GRECC contributes its experience in mentoring each participant, offering clinical practicum or developing an educational program.

In addition, the Geriatric Scholars Program is developing a web-based Learning Community to enhance communications and sharing best practices. We expect that the Learning Community will establish a model to assist the Office of Rural Health in other aspects of workforce development. Information is available on 2 VA websites: <http://www.ruralhealth.va.gov/page.cfm?pg=5> and <http://www1.va.gov/grecc/page.cfm?pg=41>.

The RESCUE Project: A Website for Caregivers of Post-Stroke Veterans

The presence of a competent and knowledgeable caregiver is a key factor of whether a patient's health improves and whether or not they can remain at home or in the community. As no soldier goes into battle alone, no Veteran travels alone of the road of recovery from illness and injury. More than three-quarters of a million Americans suffer a stroke each year and it is estimated that four out of five families in the U.S. are affected by stroke.



Resources & Education for Stroke Caregivers'
Understanding & Empowerment

This means that there is a great chance that one of your patients, friends or family members today provides informal care for a loved one who have survived a stroke.

Unfortunately, many caregivers of Veteran stroke survivors do not have the information necessary to help manage the stroke recovery process and how to avoid caregiver burden and stress.

With these burdens in mind, Constance R. Uphold, PhD, ARNP, Principle Investigator,

and the "Web-based Informational Materials for Caregivers of Veterans Post-Stroke" research team at the Gainesville, FL GRECC and the Rehabilitation Outcomes Research Center (RORC) Research Enhancement Award Program (REAP) at North Florida/South Georgia Veteran Health System (NF/SGVHS) in Gainesville, Florida are working to fill the need for stroke caregiver resources in the VA.

The RESCUE (Resources and Education for Stroke Caregivers Understanding and Empowerment) project addresses the need to increase guideline compliance in the area of family education as outlined in the VA/ Department of

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Mental Status Suggested as a Sixth Vital Sign

Over ten years ago, the VA established pain as the fifth vital sign, to be assessed routinely along with the four traditional vital signs (blood pressure, pulse, respiratory rate and temperature). Given the VA’s leadership in improving patient care, a new study is underway aiming to address another often overlooked but urgent medical problem – lack of a mechanism for routinely and objectively evaluating mental status in older patients.

Changes in mental status can be sudden and devastating because of associated increased morbidity, mortality, institutionalization, and healthcare costs. Delirium, defined as a sudden state of confusion, can occur due to a variety of iatrogenic and

health related factors including infection, medication, acid-base abnormalities and lack of sleep. Delirium has been estimated to occur in roughly a quarter of medical patients, with increased frequencies among ICU and postoperative patients.

Despite its common occurrence, healthcare workers frequently fail to recognize delirium, resulting in an urgent need for a mechanism to systematically measure mental status. A mental status vital sign would provide a more inclusive representation of overall health, would assist healthcare professionals in identifying mental status changes, and would allow longitudinal monitoring of cognitive function across

healthcare settings.

The validation study is a coordinated effort of the VA Delirium Workgroup which met last year in a consensus conference to select the mental status measurement instrument. In the validation study, admitted medical patients are assessed using the instrument and the results are compared to an expert analysis. The study is the project of Jennifer Gonik Chester, a medical student working with Dr. James Rudolph of the VA Boston GRECC. Thus far, response from nurses and patients has been overwhelmingly positive. Once completed, further studies will validate the mental status vital sign in other settings.

Awards for Non-Institutional Care Proposals

Congratulations to the all of the GRECCs that were awarded funding from the recent GEC initiatives for non-institutional care!

GRECC	Proposal Type	Project Title
New England	Geriatric Primary Care	Pharmacological Intervention in Late Life – the “PILL Clinic”
New England	Delirium Prevention	The Delirium Toolbox
New England	Geriatric Primary Care	Geriatrics in Primary Care
Bronx	Transitional Care	A Transitional Care Program to Reduce Hospital Use and Institutional Care
Pittsburgh	Caregiver/Dementia	Dementia Medical Home
Baltimore	Geriatric Primary Care	Decreasing Barriers to Care for Veterans with Dementia
Durham	Care Management/Dementia	Transitional Care Partners for Older Veterans at Home
Durham	Care Management	Evidence Based Protocol to Minimize Institutionalization of Behaviorally and Cognitively Impaired Geriatric Veterans
Gainesville	Transitional Care	Safehome: A Suite of Technologies to Support Care of Veterans with Dementia
Cleveland	Care Management/Dementia	Enhanced Care Coordination for Veterans with Dementing Illness
Ann Arbor	Transitional Care/Dementia	Bridging the Gap: Care Management for Veterans with Cognitive Impairment at Times of Transition
Madison	Transitional Care	VA Coordinated Transitional Care Demonstration Program
Salt Lake City	Caregiver/Dementia	Web Support for Caregivers of Rural Veterans with Dementia
Puget Sound	Patient Education	Implementation of the Long Term Care Resource and Shared Decision Making Guide
Palo Alto	Geriatric Primary Care	Geriatric Primary Care – Behavioral Health

Daytime Sleeping Associated with Less Functional Recovery

A recent VA HRS&D funded study found that excessive daytime sleeping during inpatient rehabilitation is associated with less functional recovery among older people. Cathy Alessi, MD of the GRECC at the VA Greater Los Angeles Healthcare System (VA GLAHS), was the principal investigator of this recently published study (*Sleep* 2008;31(9):1291-1300). Co-authors on this work included Jennifer Martin, PhD; Adam Webber, Bsc(Hons), MRCP(UK); Tarannum Alam, MD; Judith Harker, PhD; Michael Littner, MD; and Karen Josephson.

This prospective, observational cohort study enrolled 245 older adults admitted to one community and one VA inpatient rehabilitation site. During the inpatient rehabilitation stay, sleep was estimated both objectively (by wrist actigraphy and behavioral observations) and subjectively by questionnaires.

Results showed that sleep disturbance

was common among older people in the rehabilitation setting, with a mean nighttime percent sleep (i.e., percent time asleep over time between bedtime and wake-up time) of only 52.2%. Participants were asleep 15.8% of the daytime. Participants reported their sleep was worse during the rehabilitation stay compared to their prior sleep patterns.

Functional recovery between admission and discharge from rehabilitation (measured by the Functional Independence Measure) was not significantly associated with nighttime sleep quality measured both subjectively and by actigraphy. However, more daytime percent sleep (both when measured by actigraphy and by observations) during the rehabilitation stay was associated with less functional recovery from admission to discharge, even after adjusting for other significant predictors of functional recovery.

Even after 3-months of follow-up from admission to the rehabilitation unit, more daytime sleeping during the rehabilitation stay remained a significant predictor of less functional recovery in adjusted analyses.

These findings suggest that sleep disturbance is common among older people undergoing inpatient post-acute rehabilitation, and more daytime sleeping during the rehabilitation stay is associated with less functional recovery; a relationship that persists well after discharge.

This research team is currently testing whether efforts to improve sleep in the rehabilitation setting using behavioral and other nonpharmacological measures can improve functional recovery and other measures of quality of life among older Veterans.



Research Team at the Greater Los Angeles GRECC

Front Row: Monie Vukelich, Karen Josephson, Chris Kurtz, Jennifer Martin

Back Row: Judy Harker, Lavinia Fiorentino, Cathy Alessi, Sergio Martinez, Terry Vandenburg

Health Care Workforce for an Aging America: Why VA Must Support Its GRECCs

Ken Shay, DDS, MS

Almost two years ago, the Institute of Medicine released its report of the Committee on the Future Health Care Workforce for Older Americans: "Retooling for an Aging America: Building the Health Care Workforce." By its own admission, the report reprised prior recitations by IOM and others, over the past three decades, of the growing proportion of elderly and very elderly in America, of their greater and different health care needs, of the stagnant growth or even declining numbers of the geriatrician workforce, and of the inadequacy of train-

ing in geriatrics for health providers of all disciplines. But its appearance at this time may—it is hoped—spark some real change to a more significant extent than any of its forerunners was able to, for a number of reasons: the "approaching tsunami" is now upon us; the recommendations in the report are deliberately restricted to those for which a firm evidence base exists; and a substantial amount of the report is devoted to calls for and examples of innovative solutions, particularly those drawing on informal caregivers.

VA will need to be central to the country's response to this report, if only

because VA is facing an even worse situation. The report addressed a "crisis" in which 20% of the population will be age 65 or over in twenty years. VA's active patient population is currently more than 50% over age 65. The report expresses grave concerns that, if trends continue, the current ratio of 1 geriatricians and geropsychiatrists to every 4,100 Americans over age 65 will drop to about 1 per 8,000. Yet VA's current ratio is already 1 per 6,000. VA faces equivalent or worse challenges—inadequate numbers and inadequate preparation in geriatrics—in nursing, social work, psychology, physical therapy, occupational therapy, pharmacy, and others.

How is it that VA is so ill-prepared for

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Contributing Factors to Vitamin D Deficiency and Its Health Outcomes

A pilot study, conducted by Muralidhar Pallaki, Denise M, Kresevic, Christopher J. Burant, Jennifer E. Denton, and Adam E Higgins, at the Cleveland GRECC, looks at the impact of Vitamin D deficiency on health outcomes.

It has been estimated that 1 billion people worldwide have 25-hydroxyvitamin D [25(OH)D] deficiency (Holick, 2007). Emerging evidence substantiates that significant morbidity (e.g. bone loss, falls, hypertension, infections, some cancers) is associated with low 25(OH)D levels (<32 ng/mL) in older adults (Cannell et al., 2008; Peterlik & Cross, 2005).

The impact of 25(OH)D deficiency on poor health outcomes appears to be multifaceted. Factors such as frailty, treatment adherence, and dietary intake of vitamin D must be further explored.

Frailty, a multi-dimensional syndrome of physiological decline causing vulnerability to adverse outcomes, has been associated with 25(OH)D deficiency and its sequelae (Shardell et al., 2009). Assessment of frailty and other health outcomes is necessary to understand the impact of 25(OH)D deficiency on overall health.

Treatment adherence has been identified as a risk factor in poor health outcomes. Previous research by the investigators using chart review methodology identified a lack of response to vitamin D supplementation and postulated adherence to be a contributing factor. In order to more fully understand inadequate response to vitamin D supplementation, it is necessary to determine the most accurate way to evaluate adherence, as well as its potential effect on overall health.

Low dietary intake of vitamin D has also been identified as a contributing factor to 25(OH)D deficiency. Complicating matters, national surveys have revealed that few elders meet the recommended dietary intake guidelines for vitamin D (Calvo & Whiting, 2006).

This pilot study will assess how medication adherence, appointment-keeping, and dietary intake may contribute to 25(OH)D deficiency in older Veterans. It will also determine the feasibility of collecting information on health outcomes associated with 25(OH)D deficiency such as frailty, cognitive status, depression, and other co-morbidities. This information will help the investigators to determine factors which may contribute to persistent 25(OH)D deficiency even with oral supplementation.

GRECCS in the News, from p. 1

VA Puget Sound GRECC Despite the devastation caused by Alzheimer's disease and other forms of dementia, VA research is providing hope for a better understanding of these conditions. VA Puget Sound GRECC Acting Director Suzanne Craft, PhD, was featured in the recent Emmy-award-winning HBO series, "The Alzheimer's Project". Dr. Craft described her pioneering research, which investigates the relationship between insulin signaling and dementia. This research is especially important and timely given the epidemic of diabetes, which involves impaired insulin regulation and may be associated with increased risk for dementia.

Fortunately, Dr. Craft's research and that of other VA Puget Sound researchers suggests that diet and exercise can help regulate insulin levels and improve cognition. The HBO series featured one of Dr. Craft's studies, entitled "Macronutrient Effects on Alzheimer's Disease" or "MEAL". In this study, participants' cognitive test results and biochemistry were compared after a month of either a low-fat, low-glycemic index or high-fat, high-glycemic index diet. Those on the low-fat/low-glycemic index diet had improved beta-amyloid, insulin, and cholesterol profiles.

The series also featured a second group of studies by Dr. Craft's lab, the Studies of Nasal Insulin to Fight Forgetfulness (SNIFF). Preliminary results indicate that intranasal insulin facilitates verbal memory in older adults. In Dr. Craft's words, this research is "part of the forefront" of potentially powerful approaches to Alzheimer's Disease.



Dr Craft being filmed for the HBO Special

Healthcare Workforce, from p. 6

this situation that is worse than the "crisis?" In the same year as the IOM report, VA celebrated an important milestone: the 30th anniversary of the VA geriatric medicine fellowships. In 1978, six sites began with a total of eight trainees. The number of sites doubled the following year and is presently 64 with 161 trainees expected to complete in a few months. GRECCs have historically received stipend support to attract and train students of a range of health care disciplines in geriatric care, and nearly 300 trainees undertake this sort of experience annually. How can it be that VA is in no better shape, and by some indices in worse shape, when it comes to preparation for "the aging tsunami"?

There are several possible explanations for why VA has continued to fall behind. One explanation is that VA has trained inadequate numbers of professionals in geriatrics. Another is that those trained have not continued to work in VA. And a third is that those that VA has trained have not continued to work in geriatrics.

The first explanation does not hold water. With reference just to medicine, the population of elderly that VA cares for is less than a tenth as large as the general geriatric population, yet VA supports 1/3 of the training costs and has a hand in 2/3 of the geriatric training experiences in the country annually.

But the other two explanations not only make sense, they are undeniably correct. VA trains huge numbers but retains few, because recruitment and retention enticements for those with skills in geriatric care—skills that are supremely relevant to over half of VA's patient population—are not valued. Market forces either drive these clinicians into the private sector or out of geriatrics—or both, since most reimbursement models outside of VA fail to adequately compensate geriatric care as well.^{ao}

GRECCs are not part of the problem—if anything, their efforts have ameliorated the general shortfall, if inadequately. But GRECCS are key to the solution. Their unique tripartite mission of research, education, and clinical efforts create environments incomparable for training a motivated, energized, multidisciplinary geriatric workforce and giving it the tools it needs to deliver quality care, develop new approaches, and train others in their footsteps. Now as never before, VA must demonstrate its support for the GRECCs: its greatest resource for addressing the looming geriatric health care workforce crisis.

RESCUE, continued from p. 3

Defense Clinical Practice Guidelines for the Management of Stroke Rehabilitation.

RESCUE aims to provide helpful information about caregiving and its challenges to VA staff, Veteran stroke survivors, their family caregivers, and friends.

The RESCUE name and life preserver logo, used throughout project materials, represent the idea that a caregiver is a "lifeguard," responsible for the safety and well-being of those under their watchful care. The educational materials will be available on the Internet via the RESCUE website (to launch mid-2010) as well as through MyHealtheVet.



New England GRECC Investigators Improving Home Safety as Part of "Clinical Trial of a Home Safety Intervention for Alzheimer's Disease" (see *GRECCs in the News*, page 1)

Educational Opportunity GRECC Webinar Series – "Skills for Researchers: Research Design and Statistical Methods"

Cleveland's GRECC is pleased to announce this eight part webinar series on understanding and use of research methods in the health sciences. This webinar series will demonstrate to the following:

- Understand thoroughly the various research designs and the importance of statistical considerations early in the research process.
- Explore and present your data, identifying outliers and unusual observations and decide on the appropriate modeling technique.

Perform statistical analyses, systematically and effectively, from group comparison to multiple regression type models.

Each lecture is accessible on your PC and by dial-in from any location. Please contact Cleveland's GRECC Education Coordinator Barbara.Heath2@va.gov or Education Evaluator and leader of the series George.Kypriotakis@va.gov for details, access instructions, handouts and more information.

PUBLICATION DATA

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Sponsored by The Office of GEC, VACO

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Published twice per year by VA Puget Sound Health Care System, Geriatric Research, Education and Clinical Center.