

GERIATRIC RESEARCH, EDUCATION AND CLINICAL CENTER

Annual Report: Fiscal Year 2008

Part II: Accomplishments

NOTE: The GRECC Annual Report reflects status and accomplishments of GRECC Core Staff * (as defined below) only. The "Report Year" is from October 1, 2007 through September 30, 2008.

You are welcome to use this report format for your own internal reporting purposes,
in which case you may exceed the recommended limits of numbers of responses and their length
("list no more than..." "Describe the three most important..." "limit your response to five lines or fewer")

—**BUT**—

Please limit to **ten pages or fewer** the version **SUBMITTED TO VACO**.

IMPORTANT: Throughout this report, please **AVOID/MINIMIZE JARGON**. Each response is **much more likely to be included in secondary communications derived from the Annual Reports if it can be readily understood by a non-technical readership**.

1. GRECC NAME/LOCATION

- a. GRECC Name: Little Rock
- b. Location (*facility, VISN*): CAVHS – VISN 16

2. CONTACT PERSON

- a. Name: Kay Guthrie
- b. Position: AO
- c. Phone, e-mail: Guthrie.bkay@va.gov

3. GRECC FOCUS AREA(S)

NOTE: Please succinctly list your GRECC's Focus Area(s), one per line below. After each focus area listed, please indicate with a check mark (✓) which of the research type(s) suitably describes the work conducted (including planning, implementation, analysis, and dissemination/publication) within that focus during the Report Year. Add additional lines by positioning your cursor at the lower right side of the table and striking the "Tab" key.

GRECC Focus Area	Research Type			
	Basic Biomedical	Applied Clinical	Health Services	Rehabilitation
Cellular and Molecular Biology of Aging; Alzheimer's Disease	X			
Nutrition, Exercise and Metabolism in the Elderly		X		
Clinical Outcomes Research			X	
Functional rehabilitation				X

7. ADMINISTRATION	
<p>a. GRECC Impact on Host VAMC in Report Year: <i>list the most important ways in which the GRECC has had specific impact on host VAMC's research, staff education, program evaluation, or clinical care improvements for elderly veterans (i.e., how the GRECC has "made a difference" in these areas within the entire host VAMC) during the Report Year. Please limit your response to <u>5 or fewer</u> "ways"; and please limit your description of each of the five "ways" to <u>five lines or fewer</u>.</i></p>	<ul style="list-style-type: none"> • The GRECC has 26 funded research projects that amount to more than \$2 million in research funding during last FY which bring VERA funding to the facility. The GRECC staff also provided numerous research mentoring experiences for post-doctoral fellows, students, junior faculty, and staff from other services, published 55 journal articles/book chapters/books and provided 120 continuing education lectures. • During FY08, CAVHS employees participated in 4 live video teleconference programs and attended 3 continuing education symposiums offered by the GRECC. • During the last year, the GRECC has continued to work on 2 clinical demonstration and quality of care assessment projects – Vitamin D Deficiency and Hospital at Home evaluation. • In close collaboration with the Geriatrics and Extended Care Service, the GRECC continues to be a major provider of clinical teaching opportunities for medical students (all third-year medical students have a mandatory Geriatrics rotation through the North Little Rock Division clinical programs), medical and family practice residents, geriatric fellows, and allied health students (nurses, pharmacists, and occupational therapists) through the GRECC Expansion Traineeships. The Geriatric Clerkship for the 3rd year medical students has been rated 2nd most popular of all 3rd year clinical rotations. • Dr. Sullivan and all of the other GRECC senior investigators serve as mentors and preceptors to multiple post-doctoral fellows and junior staff. One of the 'graduating' SFPAG fellows joined the GRECC and the G&EC Service in July as a staff physician. • LR GRECC continues to lead the way in evaluating and helping to implement changes to keep CAVHS in compliance with the new VA privacy and data security mandates • We collaborated with Nursing, Research, COS, ACOS/R to develop a standardized nurse research scope of practice • Richard Dennis, PhD (GRECC primary core) serves on the new CAVHS IRB • We helped to establish and provided members and expertise for the new CAVHS IRB and R&D Committees • During FY08, the LR GRECC provided a series of in-service training sessions to the Nursing Home Care Unit (NHCU) nurses regarding nutrition and hydration problems in our older NHCU veteran population. These issues were found during a GRECC study of patients admitted to the NLR NHCU. These in-services informed the NHCU nursing staff of the study results and updated them on evidence-based best practices that may help to improve patient outcomes.
<p>b. GRECC Impact on VISN in the Report Year: <i>list the most important ways in which the GRECC has had specific impact on the host VISN's research, staff education, program evaluation, or clinical care improvements for elderly veterans (i.e., how the GRECC has "made a difference" in these areas within the entire host VISN) during the rating period. Please limit your response to <u>5 or fewer</u> "ways"; and please limit your description of each of the five "ways" to <u>five lines or fewer</u>.</i></p>	<ul style="list-style-type: none"> • Dr. Chernoff is a member of the VISN 16 Geriatrics & Extended Care committee as the GRECC representative • During FY08, health professional employees of VISN 16 facilities attended 4 live video teleconferences (including staff from Alexandria, Biloxi, Houston, Jackson, Muskogee, Oklahoma City and CBOCs in Panama City and Pensacola), attended the National GRECC Audioconference presented by the LR GRECC on Exercise in Older Adults given by Dr. William Evans; attended our 3 continuing education conferences • Dr. Chernoff is a member of the VISN 16 Geriatrics and Extended Care committee as a representative from the GRECC. • In the last year, the GRECC has continued to play a major role in helping to shape VISN policies regarding Geriatrics and Extended Care by working closely with VISN 16 CMO. • LR GRECC continues to work with the VISN and SLVHCS to develop the foundation for a Hospital at Home program in New Orleans. This FY, we established contacts with expertise in this initiative from Portland

VAMC and from Johns Hopkins. A consensus conference to address issues including low enrollment was scheduled for early September but was cancelled due to Hurricane Ike. This conference has been rescheduled for early December 2008

- Dr. Sullivan is a member of the VISN 16 Leadership Committee as a representative from the GRECC

c. **GRECC Trend-Setting Innovations since October 1, 2003:** *list the most significant GRECC research, education or clinical innovations in the past five years. For each item, provide date or date range, GRECC core staff responsible, and a description. Please limit your response to 5 or fewer innovations; and please limit each of the five innovation descriptions to five lines or fewer.*

- In close collaboration with the VISN 16 leadership, the GRECC has established several ongoing Clinical Demonstration Projects including the Hospital at Home program at New Orleans and the multiphase initiative designed to address the epidemic of hypovitaminosis D among older veterans. Prior initiatives lead to the development of more effective clinical strategies for evaluating and treating sleep disorders in older veterans and the need to monitor for cognitive decline in older veterans with PTSD. Responsible persons: **Dr. Sullivan, Kortebein, Bodenner, Richards, Hart.**
- Introductory course in geriatrics for Surgical Residency students. Responsible person: **Dr. Ronni Chernoff.** This course was developed for general surgery residents and is a mandatory part of their orientation. It is 8-9 hours of fundamentals in geriatrics needed for surgeons to better care for elderly patients. The course is taught by the staff/faculty from the GRECC and Geriatrics and Extended Care.
- This year, GRECC staff are providing a series of lectures as part of the Internal Medicine resident physician weekly noon conference series
- Dr Kortebein has provided lectures to the PM&RS 1st year medical students (2006-08)
- GRECC research has been very innovative in developing strong intra- and inter-service/department collaborations involving basic, clinical and health services researchers which has resulted in 3 program projects, a large VA outcomes study, and multiple other research projects and a strong emphasis on translational research. **Drs. Sullivan, Kortebein, Bodenner, Griffin, Reis, Evans, Barger and Wolfe.** Although seriously impacted by the current issues relating to the restrictions placed on the VA research program by ORO, efforts are continuing to maintain these collaborative efforts.
- Under **Dr. Ronni Chernoff's** leadership, the GRECC developed an innovative state and VISN-wide education program for health professionals in geriatrics This program used many strategies including continuing education seminars, live interactive video teleconferences, self-study programs, printed and syllabus materials; faculty training seminars which have lead to undergraduate course development; an educational newsletter; clinical training experiences; mentoring experiences; and an informational website. Much of this activity was funded by the Arkansas Geriatric Education Center grant (Chernoff PI).
- **Dr. Ronni Chernoff** received a contract from HRSA to write a White Paper on Clinical Nutrition Education and Training in the Health Professions which will be used for policy initiatives if Title VII funding is restored. This was a multi-disciplinary panel of experts reviewing the existing educational opportunities in geriatric nutrition across selected health professions and making recommendations for future funding opportunities. **Drs. Sullivan (Little Rock,)**, **Sanders (San Antonio),** and **Robbins (Madison)** were other GRECC representatives on this committee.

5. RESEARCH

a. **Key Findings Published in the Report Year on projects for which GRECC Core Staff was PI or Co-PI:** *list five or fewer; for each item provide GRECC Core Staff name(s), journal reference, and description of topic/method/results/clinical significance. Please limit each response to 5 lines or fewer.*

- **Zhang XJ, Irtun O, Chinkes DL, Wolfe RR.** Acute responses of muscle protein metabolism to reduced blood flow reflect metabolic priorities for homeostasis. *American Journal of Physiology - Endocrinology & Metabolism* 2008 March;294(3):E551-E557. The experiment measured the synthetic and breakdown rates of muscle protein in the hindlimb of rabbits with or without clamping the femoral artery. A 50% reduction in the femoral artery flow did not change muscle protein synthetic or breakdown rate in leg muscle. Full clamp of the femoral artery reduced leg flow by 42%, the muscle protein synthetic rate by 26% and the muscle protein breakdown rate by 18%. Neither the partial nor full clamp reduced the intracellular net protein balance in leg muscle. The acute responses of muscle protein kinetics to the reductions in blood flow reflected the metabolic

priorities to maintain muscle homeostasis.

- **Barger SW, DeWall KM, Liu L, Mrak RE, Griffin WS.** J Neuropathol Exp Neurol. 2008 Aug;67(8):773-83. PMID: 18648325 [PubMed - indexed for MEDLINE]: Relationships Between Expression of Apolipoprotein E and B Amyloid Precursor Protein are Altered in Proximity to Alzheimer b-amyloid Plaques: Potential Explanations From Cell Culture Studies: Our study addressed questions related to the roles of two proteins that are important in development of Alzheimer's dementia (AD)—apolipoprotein E (ApoE) and beta amyloid precursor protein (beta APP). The importance of these proteins is emphasized as 1) inheritance of ApoE4 instead of ApoE3 dramatically increases risk for developing AD; 2) increasing production of beta APP is necessary for normal nerve cell responses to stresses such as aging; and 3) mutations in beta APP cause AD. The first question asked whether one of these proteins regulates production of the other, and the second asked if nerve cell stress results in dysregulation of any such interaction in AD. In answer, we showed that limiting the production of ApoE drastically limits the ability of nerve cells to increase production of beta APP in response to stress; that compared to ApoE3, ApoE4 is a very poor inducer of beta APP; that there is clear evidence that production of both ApoE and beta APP increases in nerve cells of cognitively intact people as they age—the greatest risk factor for development of AD; and moreover that there is disruption of the normal interaction of these two proteins in AD as nerve cells nearest to plaques have increased ApoE but not beta APP. These findings suggest that individuals with ApoE4 are less able to respond to stressful events such as those associated with development of the brain changes that accompany AD.
- **Kortebein P, Bopp MM, Granger CV, Sullivan DH.** Outcomes of inpatient rehabilitation for older adults with debility. Am J Phys Med Rehabil 2008; 87(2):118-25: This retrospective study examined the functional outcomes and discharge location of older adult patients undergoing inpatient rehabilitation for debility/deconditioning. The patient data analyzed was from a large national rehabilitation database for the years 2002-03. We examined the results of more than 60,000 patients, and found that patients with a primary diagnosis of debility/deconditioning recover function just about as well as other more traditional rehabilitation patient populations, and approximately 70% of these patients are discharged to home. This is the first study to examine these outcomes in this patient population.
- **Dennis RA, Przybyla B, Gurley C, Kortebein PM, Simpson P, Sullivan DH, and CA Peterson.** (2008) Aging alters gene expression of growth and remodeling factors in human skeletal muscle both at rest and in response to acute resistance exercise. Physiol Genomics 32(3):393-400. The study developed a custom method to quantify molecular differences between skeletal muscle of young and elderly adults at rest and after weight lifting exercise. Differences were identified in factors related to muscle growth and the ability for muscle to adapt to the demands of exercise suggesting that certain elderly individuals have a diminished ability to respond to exercise training. The publication was touted by the affiliate University to the National Institutes of Health as a cutting edge advancement that has the potential to significantly enhance personalized healthcare.
- **Dennis RA, Johnson LE, Roberson PK, Heif M, Bopp MM, Cook J, and DH Sullivan.** (2008) Changes in Prealbumin, Nutrient Intake, and Systemic Inflammation in Elderly Recuperative Care Patients. J Am Geriatr Soc; 56(7):1270-5. Prealbumin is a protein in the blood that has historically been used as an indicator of whether or not a person is consuming adequate amounts of protein. However, a debate exists as to the value of prealbumin as a nutritional marker during illness and hospitalization. The study examined prealbumin and protein intake for older recuperative care patients, and found that the two were related but that systemic inflammation in the patient exerted a much more-powerful influence on prealbumin concentration. These results emphasize that monitoring the change in prealbumin is not an adequate substitute for a more-detailed nutritional assessment in this population.

b. Key Findings Published in the Report Year on work in which GRECC Core Staff served as Co-Investigators to a Non-GRECC PI: *list five or fewer; for each item provide GRECC Core Staff name(s), journal reference, and description of topic/method/results/clinical significance. Please limit each response to 5 lines or fewer.*

- Liu, Longjian; Yin, Xiaoyan; Ikeda, Katsumi; Sullivan, Dennis H; Eisen, Howard J: Micronutrients, Inflammation And Congestive Heart Failure Among The Elderly: Nutritional Perspectives On Primary Prevention And Clinical Treatment. Clinical and Experimental Pharmacology and Physiology, Volume 34,

Supplement 1, November 2007 , pp. S14-S16(1) The aim of the present study was to examine the associations between micronutrients, inflammation and the prevalence of congestive heart failure (CHF) in the elderly aged 65 years, using the US National Health and Nutrition Examination Surveys. After adjusting for age, gender, race/ethnicity and other covariates, subjects with decreased folate and vitamin B12 intake and with elevated serum levels of inflammatory biomarkers (C-reactive protein and total homocysteine) had significantly higher risk of CHF than their counterparts. Subjects with decreased serum 25(OH)D levels had a significantly higher prevalence of CHF for both men and women. Multivariate logistic regression analyses indicated that a decrease of 10 ng/mL in the serum 25(OH)D level was associated with an increased relative risk of 1.22 (95%CI:1.08-1.36) for CHF. Subjects with a micronutrient insufficient status and with coexisting metabolic syndrome had an even higher risk of CHF.

- Chae M, Reis RJ, Thaden JJ: An iterative block-shifting approach to retention time alignment that preserves the shape and area of gas chromatography-mass spectrometry peaks. *BMC Bioinformatics* 2008. In order to isolate and study specific molecules within a substance, high-resolution profiling of complex chemical mixtures can be utilized. Such techniques generate datasets which contain millions of detector intensity readings, each uniquely addressed along dimensions of time (e.g., retention time of chemicals on a chromatographic column), a spectral value (e.g., mass-to-charge ratio of ions derived from chemicals), and the analytical run number. For these data to be useful, inter-run variance in the retention time of chemical species must be resolved before feature extraction, data reduction, and knowledge discovery can ensue. The study evaluated a process called 'iterative block-shifting' to determine whether it could improve the reliability of the analyses. The results indicate this technique lead to a greater than 30-fold improvement in the variance of the retention time. This method will allow for more effective profiling of complex chemical mixtures, which will allow for more detailed analyses of complex biologic processes.
- Dillon EL, Volpi E, Wolfe RR, Sinha S, Sanford AP, Arrastia CD, Urban RJ, Casperson SL, Paddon-Jones D, Sheffield-Moore M. Amino acid metabolism and inflammatory burden in ovarian cancer patients undergoing intense oncological therapy. *Clinical Nutrition* 2007 December;26(6):736-43. Cancer and oncological therapy are associated with a progressive physical deterioration, malnutrition, and enhanced inflammatory burden. The purpose of this study was to determine whether amino acid (AA) supplements can acutely stimulate muscle protein synthesis in cancer patients with ongoing inflammation and developing cachexia. Mixed muscle synthesis and breakdown was measured before and after subjects ingested 40 g of AA given in 30 mL boluses every 10 min for 3h. Serum and skeletal muscle cytokines were markedly elevated in all of the subjects compared to controls. Protein synthesis increased by 140% and protein breakdown remained unchanged after AA ingestion. Despite advanced cancer and an enhanced inflammatory burden, AA supplements were capable of acutely stimulating muscle protein synthesis in these patients.
- Smith JA, Fan CY, Zou C, Bodenner DL, Kokoska MS: 133 /10; 1006-11; 10/2007 Methylation Status of Genes in Papillary Thyroid Carcinoma; *Archives of Otolaryngology--Head & Neck Surgery*. Genes code for all the proteins made in our bodies. One way in which genes are turned on and off is by the attachment of a methyl molecule to the control region of genes. Our study examined whether or not genes are methylated differently in benign thyroid tumors and thyroid cancer. We found that certain genes are indeed methylated differently and the pattern of methylation may be useful in determining whether a particular thyroid cancer is more aggressive than others

Núñez E, Benito C, Tolón RM, Hillard CJ, Griffin WS, Romero J: Glial expression of cannabinoid CB(2) receptors and fatty acid amide hydrolase are beta amyloid-linked events in Down's syndrome. *Neuroscience*. 2008 Jan 2;151(1):104-10. PMID: 18068305 [PubMed - indexed for MEDLINE]. When nerve cells are stressed during Alzheimer's disease (AD) the endogenous cannabinoid system (ECS) is activated. We used tissue from brains of individuals with Down's syndrome (Down's), with its virtually certain AD outcome, to study the roles of two important proteins in the ECS (one a cannabinoid receptor called CB2 and the other an enzyme named fatty acid amide hydrolase [FAAH]) in the characteristic AD-like brain changes that are noted at middle age in individuals with Down's and in AD at older ages. We also studied the possibility that alterations in the production of this receptor and enzyme are related to the brain changes that are characteristic of AD. In support of our previous findings, we found that in response to the stress of Down's both microglia and astrocytes are activated. Moreover we found that CB2 and FAAH production is elevated in microglia and astrocytes, respectively, when compared to that in brain tissue from non-Down's individuals. In addition,

increased production of these proteins in microglia and astrocytes was associated with the amyloid beta plaques characteristic of AD. These results suggest that the induction of these elements of the ECS contributes to, or is a result of, amyloid deposition and subsequent plaque formation. In addition, they confirm a striking differential pattern of distribution of FAAH and CB₂ receptors in stressful conditions compared to normal conditions.

C. EDUCATION

NOTE: DO NOT list trainee and conference data here--those data are reported in the GRECC Electronic Database.

NOTE: You may list educational activities here even if they were supported by funds that qualified for inclusion in the ePROMISE (RDIS) database if you wish.

a. **Innovations in Educational Activities Implemented during the Report Year** *(list five or fewer. Please limit each item to 5 lines or fewer and include clarification of how each activity is innovative.)*

- We have progressed from using VHS tapes to DVDs of the video teleconferences; we have instituted an innovative approach to post-tests, evaluations, participant profiles and CE certificates by putting these all on-line so participants can get their CE credits immediately after viewing a program.
- This year, GRECC staff are providing a series of lectures as part of the medical residency weekly noon conference series
- Dr Kortebein provides lectures to the PM&RS residents
- Started building linkages between our education and clinical demonstration project initiatives that allow us to use the clinical demonstrations as a forum for educating other healthcare professionals about clinical issues, principles of quality improvement, and scientific principles.
- Providing education to allied healthcare students and externs from Pharmacy, Dietetics, and Nursing regarding Vitamin D and the application of scientific principles to population screening and patient treatment while eliciting the support of the students in helping to implement the project.

b. **Exportable Educational Products First Available for Distribution in Report Year** *List five or fewer of the most important products. For each item, limit the response to five lines summarizing content, target audience, format, and product evaluation plan and results. Include educational products developed in previous years ONLY if this is the first year they have been available for distribution.*

- VHS/DVD program on Exercise and Aging developed for health professionals. The speaker was Dr. William Evans. This program was distributed to VISN 16 facilities and is approved for 2 hours of continuing education.
- VHS/DVD program on Depression in Older Adults developed for health professionals. Speakers include Dr. Roger Williams (Diagnosing Depression in the Elderly) and Dr. Lou Ann Eads (Treatment and Management of Depression in the Elderly). This program was distributed to all VISN 16 facilities and is approved for 2 hours of continuing education.
- VHS/DVD program on Wound Prevention and Treatment. Speakers were Dr. Ronni Chernoff (Nutritional Considerations in Wound Healing); Molly Brethour, RN, WOCN (Wound Prevention and Management); and Judith Applin, OTRL (Diabetic Foot Assessment and Treatment). This program was distributed to all VISN 16 facilities and is approved for 2 hours of continuing education.
- VHS/DVD program on Vision Disorders in Older Adults developed for health professionals. Speakers were Laurie Barber, MD (Dysfunctional Tear Syndrome in the Aging Population: Update on Dry Eye Disease); Richard A. Harper, MD (Common Causes of Vision Loss in Older Adults); and Fawnda Steelman, OTR/L (Low Vision Rehabilitation). This program was distributed to all VISN 16 facilities and is approved for 2 hours of continuing education.

c. **Educational programs offered by your GRECC during the report year that were evaluated for impact both immediately and at a later time, as described in "FY08Instructions" for Performance Measure 7.** *Describe at least TWO, each of which had at least 25 participants: one in which the majority of participants was from your GRECC's host facility; and one in which the majority of participants were from VAs other than your GRECC's host facility. For each, describe the educational intervention briefly and then the evaluations, including in your description of the latter the evaluation methodologies, findings, and conclusions. If the second evaluation has not yet occurred during the report year, describe your plans for it. Limit your description of each intervention and its evaluation to one-half page.*

- This year we instituted a secondary evaluation process to add to the evaluations conducted at the program when the offering occurred. We pilot tested a survey instrument with Nutrition & Aging XXII, offered in September 2007, but doing a mail survey follow-up in December 2007. We mailed surveys to 109 attendees; 8 were returned for bad addresses, 62 (61%) were returned. There were 120 attendees; 55 attendees were VA employees and 38 were from CAVHS. Questions asked if attending the program had impacted on how they practiced (84% said yes). If they said that the program did impact on practice, they were asked "how". Seventy-two percent said they have used the knowledge in patient care, 52% said they modified the way they assess patients, 52% said they changed the way they counsel patients, and 11% reported that they noticed improved patient outcomes – multiple answers were encouraged. Of those who indicated there was no impact from their attendance of the program, 6 were retired practitioners, 5% said the content was not related to their practice, and 5% reported the level of content was too high or too low. Nevertheless, 87% reported that they shared the information learned at the conference with their co-workers and 88% reported that the handouts and take home materials was beneficial to them. On subsequent program follow-up evaluations we have migrated to using an electronic form of this evaluation when attendees provide e-mail addresses. This has enabled us to get closer to assessing the real impact on practice and patient outcomes; on the electronic version, if a respondent answers "Yes" to the question of whether or not the program impacted on their practice, they will have a drop-down textbox where they can provide an example of "how" this program changed a patient outcome. Similar results have been obtained from all symposia and video teleconferences offered this year. We are presently compiling results of an exclusively CAVHS attended series of lectures by Dr. Sullivan on From Research to Practice: Improving Patient Outcomes. This program had 30 attendees from CAVHS, was conducted in June, 2008 and was evaluated in early October. Data are being entered and analyzed. Response rate to date is 30%. We have found this feedback very helpful in planning future programs that will improve patient outcomes.
- A video teleconference was broadcast in April, 2008 on GI Disorders in Older Adults. Thirty VA professional staff participated, 22 of whom were from Biloxi and its CBOCs in Panama City and Pensacola. There was a 60% response rate on the secondary evaluation. Seventy-one percent said they have used the knowledge in patient care, 43% said they modified the way they assess patients, 29% said they changed the way they counsel patients, and 6% reported that they noticed improved patient outcomes – multiple answers were encouraged. Of those who indicated there was no impact from their attendance of the program, 7 were retired practitioners, 7% said the content was not related to their practice, and 6% reported the level of content was too high or too low. Nevertheless, 51% reported that they shared the information learned at the conference with their co-workers and 81% reported that the handouts and take home materials was beneficial to them. We were planning on using this evaluation on an outreach program scheduled for New Orleans in September, 2008 but it was postponed until December, 2008 and will be reported on in FY09. This, and additional data, will be reported at GSA, Nov, 2008.
- During FY08, the LR GRECC provided a series of in-service training sessions to the Nursing Home Care Unit (NHCU) nurses regarding nutrition and hydration problems in our older NHCU veteran population. These issues were found during a GRECC study of patients admitted to the NLR NHCU. These in-services informed the NHCU nursing staff of the study results and updated them on evidence-based best practices that may help to improve patient outcomes.

7. CLINICAL DEMONSTRATION PROJECTS

a. **Clinical Demonstration Projects Underway in Report Year:** *list all GRECC Clinical Demonstration Projects underway. For each item, indicate whether New or Ongoing in Report Year. You may include up to five lines of descriptive text for each Project.*

NOTE: The number of Projects listed should be equal to the number of Clinical Demonstration Projects you have listed and named in the GRECC Electronic Database.

- Hospital at Home – This project was initiated in Spring 2007. The LR GRECC is providing technical expertise for the evaluative component of this project examining an early discharge hospital at home model being implemented at the New Orleans VA. Active enrollment at SLVHCS began in October 2007 but was lower than anticipated. Several problems became apparent after activation of this project, and these will be addressed at the conference scheduled for December 2008 (postponed from Sept as above) (Ongoing)
- Evaluation and treatment of hypovitaminosis D – Project initiated Spring 2007. This project is evaluating the

effectiveness of a clinic-based screening and treatment protocol for hypovitaminosis D in older veterans in primary care outpatient clinics. An initial component of this project has been completed, although the project has been delayed by an evaluation by the CAVHS IRB/Research office. This was just recently resolved, and we are ready to proceed with this program. (Ongoing)

b. **Evaluation of Clinical Demonstration Projects:** *for each GRECC Clinical Demonstration Project listed in 7a above, summarize the evaluation activity. If no evaluation results are available, be explicit as to the focus of the planned evaluation, and when it is anticipated to occur. If the project has been completed during the Report Year, provide key findings and their significance.*

NOTE: Do not list patient service use data here. Those data are reported in the GRECC Electronic Database.

- **Hospital at Home:** This project just began enrolling patients on October 1, 2007. Ongoing evaluation showing problems with staff 'buy in', logistic concerns and recruitment issues. As noted previously, a conference scheduled for September but has been rescheduled for December 5, 2008.
- **Vitamin D:** This is a multi-phase project. In the initial phase of this project we evaluated the efficacy of a treatment protocol to replenish low vitamin D levels. We found that the vitamin D level increased in 74% of 102 patients treated with vitamin D, and in 56% of this group, the vitamin D level increased to a normal level. As noted above, there have been some delays with this project due to an institution-wide research investigation, however, we are now preparing to initiate the screening and treatment implementation program in the CAVHS geriatric primary care clinic. We will evaluate treatment success, and gain information regarding patient compliance. We also plan to incorporate nursing students, and perhaps pharmacy students, into this clinical demonstration project.

c. **New Clinical Models developed at your GRECC that were exported in the Report Year** *(list up to five examples, up to two lines each; provide name of new clinical model, name of VA or non-VA facility to which it was exported, and method of export, such as "Falls Clinic protocol sent to X VAMC"):*

- The **Hospital at Home** project was initiated at New Orleans. We are working with other VISNs (e.g. Hawaii) to promote efforts to implement at additional sites. Collaboration with Portland VAMC and Dr Leff at Johns Hopkins has been initiated this FY as we continue to work on this project.

5. COLLABORATION ACTIVITY

Provide up to five (5) examples of collaborative activities you have underway with one or more GRECCs other than your own. If possible, please try to include at least one Clinical Demonstration, one Education, and one Research example. Be sure to specify the GRECC or GRECCs with whom you are collaborating; and a description, limited to 6 or fewer lines, of the collaborative activity.

- Drs. Chernoff and Saunders (San Antonio GRECC) collaborated to provide a symposium on Health Literacy and Aging and to develop materials on health literacy and nutrition.
- Drs Chernoff and Tumosa (St Louis GRECC) collaborated on a chapter on interdisciplinary teams for a manual on workforce development.
- Dr Morley and Evans collaborated on a grant proposal this FY.