



## GRECCs: VA's Network of Aging Centers of Excellence Explores Aging, Age-related Diseases and Promising Interventions.

*...what follows is a small sampling from among the hundreds of research investigations currently underway in VHA's Geriatric Research, Education and Clinical Centers (GRECCs).*

**Ann Arbor GRECC: Antipsychotic Use in Parkinson's disease patients.** Use of antipsychotics (APs) in Parkinson's disease (PD) is common. Noting the high rate at which persons with PD experience psychosis and dementia, investigators at the **Ann Arbor GRECC** hypothesized that use of APs placed patients at elevated risk for mortality. Multivariate analysis of a Veterans Health Administration database of PD patients revealed that antipsychotic users had more than twice the risk of death as observed in a matched group of non-users. The commonly used atypical antipsychotics identified during the study were olanzapine, risperidone, and quetiapine. This work highlights the need for caution when prescribing atypical antipsychotics to PD patients and the importance of always considering non-pharmacologic strategies in managing psychosis. To learn more about this research, contact Dr. Helen C. Kales at [helen.kales@va.gov](mailto:helen.kales@va.gov).

**Little Rock GRECC: Nutrient Intake and Hospitalization.** Older Veterans often become severely malnourished during hospitalization, leading to a range of complications and a higher risk of mortality. To prevent this from happening, inpatient programs need to closely monitor each patient's nutrient intake. Yet most hospitals are not adequately staffed to do this. The **Little Rock GRECC** developed and studied a novel means for completing daily patient nutrient intake assessments in less than one-third the time required by traditional methods, and the new approach was found to be more accurate as well. The greater ease and improved accuracy facilitates identification of patients at elevated risk for becoming malnourished. Anyone interested in this new approach to assessing nutrient intake can contact Dennis H. Sullivan, MD at [dennis.sullivan@va.gov](mailto:dennis.sullivan@va.gov).

**San Antonio GRECC: Proteins Block Neuronal Death.** A number of aging-related neurological diseases such as stroke, Lou Gehrig's disease, and Alzheimer's disease, involve the death of neurons in the brain. The **San Antonio GRECC** recently described ferroptosis, a previously unrecognized mechanism of neuronal death. Even more exciting, the investigators identified a protein that disrupts this mechanism. Enhancing the activity and delivery of this protein might be a new approach for supporting healthy brain aging. To find out more about this work, contact Dr. Nicolas Musi at [Nicolas.musi@va.gov](mailto:Nicolas.musi@va.gov).

## SALT LAKE CITY GRECC RESEARCH UPDATE

Local Contact: Scott Capps, GRECC A/O [scott.capps@va.gov](mailto:scott.capps@va.gov)

### New Hypertension Guidelines Incorporate SPRINT Results

The new guideline for hypertension in adults established a lower threshold to define hypertension as a blood pressure in excess of 130/80<sup>1</sup>. The new guideline incorporates outcomes from the Systolic Blood Pressure Intervention Trial's (SPRINT) study that identified benefits among those randomized to intensive (a systolic blood pressure – SBP – treatment target of < 120 mmHg) relative to standard (a < 140 mmHg SBP target) management. The main results<sup>2</sup> and outcomes specific to older adults (age 75 years and older)<sup>3</sup> identified significant cardiovascular (CVD) and mortality benefits. These outcomes did not differ for the frailest subgroup or for those with impaired gait speed<sup>3</sup>. Accordingly, the SBP goal now recommended for adults age 60 years and older is 130 mm Hg<sup>1</sup>.

Two recent reports cite additional benefits demonstrating that the intensive treatment was well tolerated.<sup>4</sup> Patient reported outcomes from the physical and mental components of the Veterans RAND 12-Item Health Survey and the Patient Health Questionnaire 9-item depression scale did not differ over time between treatment groups. These findings held in the most frail group of participants. Satisfaction with blood-pressure care was high in both treatment groups, and adherence to blood-pressure medications did not differ between groups. In addition, in a cost-effectiveness simulation study, the benefits identified with intensive SBP control occurred at costs below common willingness-to-pay thresholds per quality adjusted life year gained, regardless of whether benefits were reduced after 5 years or persisted for the patient's remaining lifetime.<sup>5</sup>

1. Whelton PK, Carey RM, Aronow WS, et al. 2017 guideline for the prevention, detection, evaluation, and management of high blood pressure in adults: J Am Coll Cardiol. doi:10.1016/j.jacc.2017.11

2. Wright JT, Jr., Williamson JD, Whelton PK, et al. A Randomized Trial of Intensive versus Standard Blood-Pressure Control. N Engl J Med 2015;373:2103-16.

3. Williamson JD, Supiano MA, Applegate WB, et al. Intensive vs Standard Blood Pressure Control and Cardiovascular Disease Outcomes in Adults Aged >75 Years: A Randomized Clinical Trial. JAMA 2016;315:2673-82.

4. Berlowitz DR, Foy CG, Kazis LE, et al. Effect of Intensive Blood-Pressure Treatment on Patient-Reported Outcomes. N Engl J Med 2017;377:733-44.

5. Bress AP, Bellows BK, King JB, et al. Cost-Effectiveness of Intensive versus Standard Blood-Pressure Control. N Engl J Med 2017;377:745-55.

