7.6 vs.  $10.7\pm7.3$ ; p=.013), and motor experiences of daily living ( $16.9\pm8.9$  vs.  $10.6\pm7.1$ ; p<.001) and motor symptoms ( $34.1 \pm 12.1$  vs.  $31.8\pm12.2$ ; p=.014). Men performed worse at inhibition ( $6.4\pm4.6$  vs.  $7.8 \pm 5.0$ ; p=.014) but made fewer errors on inhibition/switching ( $7.0\pm3.9$  vs. $7.8\pm4.4$ ; p=.05). Men had higher depression scores:  $12.5\pm8.9$  vs.  $9.4\pm7.8$ ; p=.016. No differences in performance on spatial cognition were noted. Men with moderate PD were more depressed, had worse motor and cognitive function, non-motor and motor experiences of daily living and motor symptoms than women. Sex-tailored therapies may reduce differences in performance between sexes.

## APOLIPOPROTEIN E, LEUKOCYTE TELOMERE LENGTH AND MEMORY IN EXCEPTIONALLY LONG-LIVED FAMILIES

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Exceptional aging has heritable components. One genetic risk factor for cognitive aging may be Apolipoprotein E (APOE), but it is unclear to what extent APOE relates to cognitive aging versus risk of Alzheimer's disease. Cognitive aging may also be influenced by leukocyte telomere length (LTL), posited to be a marker of "biological age". We examine the relationship between APOE, LTL, and memory in aging. For APOE, effects of  $\varepsilon 4$  ( $\varepsilon 3\varepsilon 4/\varepsilon 4\varepsilon 4$ ) and  $\epsilon 2$  ( $\epsilon 2\epsilon 3/\epsilon 2\epsilon 2$ ) versus the more common  $\epsilon 3\epsilon 3$  referent genotype on episodic (EM) and working memory (WM) were examined, comparing longevous families to the general population. Participants belonged to a multi-generational, international cohort (Long Life Family Study) including relatives from long-lived families and spouse-controls. 3,654 participants with valid memory, APOE, and telomere data at baseline were included. Regression analyses were stratified by age group and relative status, adjusting for sex, education, and country. Among controls,  $\epsilon 2$  was associated with better WM (p<0.05) in those aged 70-79. In relatives,  $\epsilon 2$  was linked to better EM (p < 0.05) in those 60-69. Within  $\epsilon^2$  carriers, longer LTL related to higher EM/WM for those <60, but lower EM/WM among those 60-69 (p<0.05). In relatives, ε4 was linked to worse EM, but better WM in those <50. Within  $\epsilon$ 4 carriers  $\geq$ 80, longer LTL related to poor EM/WM. Thus, APOE related differently to distinct memory functions, and such associations varied by familial longevity and age. LTL demonstrated both positive and negative associations with memory functions depending on APOE status and age group.

## IS THERE AN ASSOCIATION BETWEEN OBSTRUCTIVE SLEEP APNEA AND FRAILTY IN OLDER VETERANS WITH DIABETES?

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Obstructive Sleep Apnea is a highly prevalent disease, where incidence increases with age. Individuals with chronic diseases such as diabetes and obesity are at risk of OSA increasing the risk of frailty. A retrospective chart review was conducted to study the association between OSA and frailty in older diabetic Veterans. Baseline polysomnography data for 91 patients  $\geq$  65 years was obtained from the electronic health records at the Miami VA Medical Center. Patients were screened for frailty from January 2016 to August 2017, and followed until October 2018. Patients were then dichotomized into frail (Frailty Index (FI)  $\geq$ .21) and nonfrail (robust FI =<.10 and pre-frail FI  $\ge$ .10, <.21) groups. The mean participant age is 70.9 years, with (SD) of 4.8. The mean age for the frail group is 71.1 years, with a SD of 5.2. Mean age for the non-frail group is 70.5 years, with a SD of 4.2. Linear regression demonstrated a significant positive linear relationship between BMI (t=2.096 p-value= .039) and the frailty index. In binomial logistic regression, adjusting for covariates, BMI was associated with increased apnea severity (OR=1.139, 95% CI= 1.044-1.241), p=.003. However, no significant association was found between FI and apnea severity. The severity of OSA based on the Apnea-Hypopnea Index had no significant association with frailty status. However, the study demonstrated a significant association between obesity and frailty, where higher BMI coincided with higher frailty. Increasing BMI coincided with increased severity of OSA, suggesting that BMI acts as a possible confounder between frailty and OSA.

## QUALITY IMPROVEMENT IN LTC: EFFECTIVENESS OF MONTESSORI-BASED ACTIVITY PROGRAMMING IN VA COMMUNITY LIVING CENTER Thomas Chacko,<sup>1</sup> Kim Curyto,<sup>2</sup>

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Montessori-based Activity Programming (MAP) was adapted for Veterans Affairs (VA) Community Living Centers (CLCs) and aims to increase independence and meaningful engagement in residents with cognitive impairment. The Montessori model prioritizes offering choice, knowing and harnessing a resident's abilities, and enabling them to carry out purposeful roles and activities. Any perceived deficit in cognitive functioning is "circumvented" by preparing the environment to support maximum independence. The implementation of MAP-VA in VA Western NY CLC involved 3 lodges, 52 staff, 16 champions, and 65 CLC residents. Standardized implementation measures demonstrated improvements over six months in five domains assessing development of a resident-directed community. Hypothesized outcomes included improved national percentile quality improvement (QI) rankings related to psychological symptoms and medications (e.g., depressive symptoms and use of antipsychotic/antianxiety medications)