had slightly higher prevalence of AD+LC but significantly higher AD+CRC and AD+HNC compared to men.

# **SESSION 2350 (POSTER)**

#### **CHRONIC DISEASE MANAGEMENT 2**

## GREATER HYPOGLYCEMIA UNAWARENESS IN OLDER COMPARED TO YOUNGER RURAL VETERANS WITH TYPE 2 DIABETES

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Hypoglycemia is of great concern in older patients, especially when complicated with multimorbidity and geriatric syndromes. We implemented a telemedicine model to address hypoglycemia knowledge, risk factors, incidence and comanagement with their primary care teams (PCT). We identified 166 consecutive rural veterans with high hypoglycemia risk, based on a local medication database (sulfonylureas and insulin), age, and recent glycated hemoglobin A1c (HbA1c). We conducted a telephone medication reconciliation and survey assessing glucose selfmonitoring (GSM), hypoglycemia knowledge and symptoms. Variables were tested using chi-square, Fisher's, and one-way ANOVA. Multivariable logistic regression model was built to assess the association of hypoglycemia and age group, adjusted with treatment, HbA1c%, self-monitoring, and knowledge. There were 54 veterans aged <65 (younger), and 112 veterans aged  $\geq 65$  years (older). Average HbA1c was higher in younger than older (8.20±1.96 vs 7.43±1.34%, p=.003). There was no difference in treatment regimens, but the older had greater GSM (p=.028) and lower hypoglycemia symptom knowledge (p=.026). Symptomatic hypoglycemia was greater in younger versus older (50.0% vs 30.4%, p=0.014). Recent (past-2-weeks) hypoglycemic events were more frequent in younger than older (24.1 vs 1.79%, p<.001). Regression analyses showed that younger veterans were more likely to have hypoglycemia (OD=2.37, 95% CI 1.11-5.04). Our results indicate a great need to evaluate older adults with high hypoglycemia risk, in whom we observed less reports of hypoglycemia albeit with similar regimens and lower HbA1c. We suspect greater hypoglycemia unawareness, thus we are implementing a project using continuous glucose monitoring in this high-risk population.

## SESSION 2355 (POSTER)

## DEMENTIA AND DEMENTIA CARE

## SOCIAL NETWORK BY ENVIRONMENTAL DESIGN: FACILITATING THERAPEUTIC EFFECT IN LTCF FOR PEOPLE EXPERIENCING DEMENTIA

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The relationship between the physical environment and the prevalence of social interaction have been a core topic of inquiry in environmental gerontology. It has been estimated that around 25 million people worldwide have dementia, and the number will exceed 80 million by 2040. A growing body of literature in the areas of environment-behavior studies shows that the physical environment affects positive behavioral changes, in turn, affecting individual, group and organizational outcomes, but little research has focused on older adults especially those with cognitive impairment by targeting the Dementia Enabling Environment of care facilities. By using non-pharmacological interventions, the purpose of this study is to initiate positive social network among dementia residents and staff by analyzing the spatial configuration of the physical environment and layout in long-term care facilities (LTCF). The findings may give evidence-based design guidelines for future research and design of memory care facilities to promote therapeutic experience for older people experiencing early to moderate stage dementia. Using a 3-stage, multi-method research design such as space syntax, behavior mapping techniques and direct observations, this study objectively measured the spatial configuration of LTCF (physical environment) to evaluate the provision of social interactions (among dementia residents and staff), promote positive health outcomes and healthy living for people experiencing early to moderate stage dementia. This study was able to establish that the architectural layout and environmental design could have a positive and protective effect against dementia in environmental gerontology and geriatrics.

#### DESIGN AND EVALUATION OF AN ECOLOGICAL MOMENTARY ASSESSMENT TOOL FOR ASSESSING DEPRESSION IN DEMENTIA

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Background. Assessing depression in people with dementia is challenging due to limitations of retrospectivity. Mobile Ecological Momentary Assessment (EMA) provides a novel approach in assessing depressive symptoms by collecting informant measures in intervals throughout the day, decreasing recall bias and increasing representativeness. Objective. The objective of this study is to design an EMA application for assessing depression in individuals with dementia. Methods. A literature review was conducted to determine commonly used and validated assessments for depression in dementia. Assessments were analyzed for common items, where items less commonly used (<50% of assessments sharing the item) or not relevant to be collected using EMA were excluded. Wording of items were also analyzed to develop the specific structure of questions for the EMA assessment. Results: Six assessments were found and demonstrated adequate performance outcomes. Items fell into either mood-related, dementia-related, vegetative, psychotic or positive mood symptom groups. The mood-related group was analyzed separately for prominent items, which were sadness, anxiety, pessimism, loss of interest and irritability. Wording of items were modified to be consistent with being collected throughout the day, rather than retrospectively. These items