but localized analysis of the barriers is necessary to ensure that the solutions are appropriate in a specific context.

**USING SPATIAL ANALYSIS TO OPTIMIZE DISASTER PREPAREDNESS FOR FRAIL OLDER ADULTS**

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The Florida Department of Elder Affairs (DOEA) provides programs and services for over 65,300 older people and adults with disabilities. These individuals are uniquely vulnerable and may be disrupted, displaced, and disoriented during the natural disasters common to Florida. DOEA clients are homebound or dependent upon community-based services to provide supervision or direct assistance to perform basic self-care. Often, clients are unable to complete personal care independently, which makes sheltering in place a unique challenge, yet they can only evacuate with special transportation and support arrangements in the shelter. It is critical to DOEA to accurately predict clients likely to be seriously affected by storms, plan for relocation before an event, and arrange for the provision of extended care after. DOEA responded by utilizing ArcGIS mapping software to join client residence locations to evacuation zone polygons and developed a methodology to prioritize clients with personal and functional barriers to evacuation. Proven during Hurricane Michael (2018), local emergency managers were able to use this tool to complete wellness checks on survivors before outside aid arrived. This initiative is evolving with the challenges posed by each storm season. Hurricane Dorian (2019) required the addition of latitude and longitude of client locations for when traditional street navigation became unavailable. Importing and overlaying primary data on secondary emergency management resources is a strategy that could be replicated by other organizations that have similar needs to reconcile individual locations in context of local threats, making this methodology transferrable to other disaster and flood-prone communities.

**HEPATIC AGO2-MEDIATED RNA SILENCING REGULATES SYSTEMIC GLUCOSE METABOLISM.**

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Obesity causes various metabolic complications, including insulin resistance and T2DM. However, currently, we have a limited understanding of the pathophysiology in the development of these processes. It's generally considered that obesity develops when energy intake chronically exceeds total energy expenditure. The liver is a major organ for energy consumption, then mRNA translation accounts for the majority of energy expenditure in liver. While RNA silencing regulates mRNA translation, it's unclear if RNA silencing regulates glucose metabolism. To investigate the role of RNA silencing in glucose metabolism, we focused on Argonaute 2 (Ago2), which is the main component of RNA-induced silencing complex that carries out RNA silencing. By generating liver-specific Ago2-deficient (L-Ago2 KO) mice, we revealed Ago2 regulates the maturation process of metabolic disease related miRNAs (MD-miRNAs), that silence genes critical for glucose metabolism. In addition, Ago2-deletion enhances ATP consumption associated with mRNA translation. Consequently, inactivation of hepatic Ago2 protect from diet-induced glucose intolerance in mice. Then, to further investigate if these molecular mechanisms are still activated in "older mice", we employed 34-week of age mice and analyzed. Around this age, despite having the similar body weight, L-Ago2 KO mice fed HFD exhibited lower blood glucose and serum insulin levels. Consistently, expression levels of MD-miRNAs were decreased in the liver of L-Ago2 KO mice fed HFD. These results suggest that hepatic Ago2 function is continuously activated in "older mice" fed HFD, leading to enhanced biogenesis of MD-miRNAs and reduction of their target mRNAs, and these alterations are associated with systemic glucose metabolism.

**VALIDATING THE CARE PREFERENCE ASSESSMENT OF SATISFACTION TOOL TO MEASURE QUALITY OF CARE IN NURSING HOMES**

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The Institute for Healthcare Improvement's Triple Aim calls for measures of the 'patient care experience' to understand and improve the quality of care delivery. But, quality measures in the nursing home (NH) historically lack the resident perspective. Measuring whether residents are satisfied with the fulfillment of their care preferences using the Care Preference Assessment of Satisfaction Tool (ComPASS) has been encouraged nationally by the Centers for Medicare and Medicaid (CMS); however, the ComPASS has not been validated as a measure of the resident care experience. The purpose of this study was to compare ComPASS to the Ohio NH Resident Satisfaction Survey (a widely accepted quality measure for reimbursement). We examined 196 resident responses from 28 NHs in Pennsylvania using multilevel modeling to account for dependencies in the data (residents in the same NH may respond similarly compared to residents from different NHs). Residents were 81.2 years old (SD= 11.1), female (70.4%), and white (80.1%). Residents with higher scores on the ComPASS reported significantly higher levels of satisfaction with care (B=2.94, SE B=0.59, $p<0.000$). Results from this study support the potential use of ComPASS to measure, track, and improve the quality of NH care. Using ComPASS aligns with CMS's Section F of the Minimum Dataset, an assessment of residents' preferences which promotes the delivery of more person-centered care. Ultimately, ComPASS can help benchmark the quality of the resident care experience across facilities which aids staff, facilities, policy-makers, and NH-shoppers in improving decision-making and care delivery.

**ASSOCIATION BETWEEN GAIT SPEED MEASURED USING A WEARABLE DEVICE AND SARCOPENIA**

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As slow gait speed is a major feature of frailty and a diagnostic criterion of sarcopenia, gait speed measurement is widely used. Nowadays, with development of wearable devices, it is possible to measure daily-life gait speed without additional effort just by wearing the device. It is meaningful to measure daily-life gait speed and to analyze the association between the speed and sarcopenia. Participants were men over 50 years of age who visited the university hospital. Daily-life gait speed was checked using a smart belt (WELT) for 4 weeks. Afterwards, a survey about past medical history, usual gait speed measurement, handgrip strength measurement, and dual energy X-ray absorptiometry were performed. A total of 217,548 daily-life gait speed measurement data were analyzed for 106 participants. The mean daily-life gait speed was 1.23 ± 0.26 m/s. The mean age was 71.1 ± 7.6, and daily-life gait speed was significantly slower as people get older. ($P<0.001$) Additionally, weekday gait speed (1.23 ± 0.26 m/s) was significantly faster than weekend gait speed (1.22 ± 0.26 m/s). ($P<0.001$) Participants with sarcopenia (1.15 ± 0.25 m/s) had significantly slower mean daily-life gait speed than normal subjects (1.23 ± 0.26 m/s). ($P<0.001$) In analyzing factors related to gait speed, age and skeletal muscle mass of lower limbs were significantly associated with mean daily-life gait speed. Additional information about the gait speed can be obtained by measuring daily-life gait speed, and the daily-life gait speed has a significant association with the skeletal muscle mass of lower limbs.

## NATURALISTIC DRIVING BEHAVIOR AS A NEUROBEHAVIORAL MARKER OF PRECLINICAL ALZHEIMER'S DISEASE

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Decline in driving skills begins in preclinical AD, when an older adult remains cognitively normal, but the underlying disease process has begun. Preclinical AD is detectable among cognitively normal individuals using molecular biomarkers: positron emission tomography (PET) imaging and cerebrospinal fluid (CSF). The aim of this prospective, longitudinal study is to determine whether naturalistic driving behavior using in-vehicle dataloggers can distinguish older adults with (n=36) and without preclinical AD (n=134). Driving data was calculated as mean/month for several variables (number of trips/day, trip length, trip time, speeding, and hard-braking) for participants followed between one to 46 months. Using stepwise logistic regression, the area under the receiver operating curve (AUC) and 95% confidence interval for these five variables was 0.73 (0.63-0.79) in distinguishing those with and without preclinical AD via amyloid imaging. When age, gender, race, and education were added, the model improved: 0.80 (0.72-0.88). Finally, when apolipoprotein ε4 allele (APOε4), obtained via blood or saliva, was added to the model, accuracy improved: 0.84 (0.77-0.89). Similar results were found using CSF biomarker tau/Aβ42: AUCs (95% CI) were 0.68 (0.58-0.79) for driving variables alone, 0.77 (0.69-0.86) for driving variables and demographics, and 0.87 (0.80-0.94) driving variables, demographics, and apolipoprotein ε4 allele. These promising findings suggest that naturalistic driving behavior can predict those with and without preclinical AD. The AUC is further improved with demographics and APOε4, an easily obtainable genetic biomarker. This model may be used in clinical/research settings as a screen or adjunct for diagnostics and prognostics purposes.

## YES, CHANGING HOW YOU TEACH DOES MAKE A DIFFERENCE

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Perceptions of an educational experience's value impact learning. "Hands-on" activities promote deeper learning and retention. Educators may jettison more poorly rated sessions, not having time for perceived content revisions based on evaluation data. We sought to determine if simply changing the sequence of a session's activities, using the same content, improved learner evaluations. Using a session focused on application of resources for dementia patient caregivers, we provided two versions of the same content to 2 groups of clinicians. In session version #1 (V1), participants were asked about caregiver stresses and barriers and then viewed two video triggers of a dementia patient and a stressed family caregiver. Participants then identified the caregiver's struggles and recommended resources. At the session's end they were provided with a Geriatric Fast Fact (GFF) (www.geriatricfastfacts.com) that hyperlinked to a variety of evidence-based resources by topic. In session version #2 (V2), only the content was flipped. The GFF was presented prior to the video, with clinicians were then tasked to identify best resources using the GFF. The V2 cohort rated the session higher than V1 cohort on a 4-point scale (1= Excellent, 4= Poor). Overall quality of learning plan (V1 =1.4 ; V2 =1.3); Would you recommend the session to peers (V1 = 1.5; and V2 =1.2) and Overall course evaluation (V1 = 1.5; V2. = 1.4) all improved. Using learner evaluations to revise the sequence of the same content was an effective educational strategy. Don't throw the baby out with the bathwater!

## INFLUENCE OF DEPRESSION, SOCIAL SUPPORT AND MEANING IN LIFE ON SUICIDAL IDEATION OF OLD ADULTS HEMODIALYSIS PATIENTS

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Purpose: This study is to identify how depression, social support and meaning in life influence to suicidal ideation of home based Korean old adult renal dialysis patients and the relating factors according to their general characteristics. Methods: This descriptive correlative study was conducted through a organized and structured self-administrated questionnaire and 120 sampled home based old adult renal dialysis patients. Collected data was analyzed by t-tests, ANOVA, Pearson's correlation coefficient and multiple