healthcare providers that promote healthy lifestyles may effectively improve coping capacity and episodic memory in this population group. Note: First author: Feilong Wang, Co-first author: Shijie Li, Corresponding author: Yanni Yang

DETERMINANTS OF MORTALITY AMONG OLDER ADULTS BY AREA-LEVEL MATERIAL AND SOCIAL DEPRIVATION.
Helen-Maria Vasiliadis,1 Samantha Gontijo Guerra,2 and Isabelle Pitrou,2 1. University of Sherbrooke, Sherbrooke, Quebec, Canada, 2. University of Sherbrooke, Longueuil, Quebec, Canada

Although social inequalities are increasing worldwide, few studies have examined their consequences on mortality among older adults. The aim of this research was to examine determinants of mortality among older adults at the individual, health system and area level. Data come from the ESA-Services study conducted in 2011-2013 in Quebec including 1,765 adults aged ≥65 years. Mortality 3 years after the survey interview was obtained from vital statistics data. Material and social deprivation of area of residence was determined using the Pampalon index categorized into quintiles as follows: least deprived (1st quintile), middle quintiles (2nd, 3rd, 4th quintiles), most deprived (5th quintile). Other variables included clinical, psycho-behavioural, socio-economic and demographic factors. Cox regressions were used to examine the determinants of mortality while stratifying by level of area deprivation. Compared to most deprived areas, mortality was higher for those living in middle quintiles of deprivation. In the overall analyses, age, chronic conditions, social support and continuity of care were associated with mortality. When examining mortality by area of deprivation, results showed higher mortality ratios with cognitive impairment in middle and least deprived areas. In least deprived areas, female sex, the presence of bipolar disorder and dementia were associated with mortality. The strong associations between mortality, cognition, dementia, bipolar disorder and female sex in least deprived areas might be partially explained by a closer follow-up and earlier detection of this population. Continuity of care was also associated with significantly lower mortality ratios for those living in middle and most deprived areas.

EFFECTIVENESS OF A CARE DELIVERY MODEL FOR HIGH-NEED COMMUNITY-DWELLING OLDER ADULTS
Kuei-Min Chen,1 and Hui-Fen Hsu,2 1. Kaohsiung Medical University, Kaohsiung City, Taiwan (Republic of China), 2. Kaohsiung Medical University, Kaohsiung, Taiwan (Republic of China)

The effectiveness of sufficient care coordination for high-need community-dwelling older adults has not been discussed. This study aimed to examine the effectiveness of a newly-developed care delivery model for high-need community-dwelling older adults. A cluster randomized controlled trial with repeated measures design was employed. A total of 145 high-need older adults participated in the study and were randomly assigned to either the intervention group or comparison group. A categorized list of care services based on the types of high-need older adults as the intervention allowed care coordinators to make adequate care service linkages. The intervention period ranged over 6 months with regulated home visits and assessments. Functional ability, quality of life, depressive symptoms, and healthcare and social service utilizations were measured at baseline, and at 3 and 6 months into the intervention. The participants’ satisfaction with care delivery was measured at the end of 6-month intervention. Results showed that the intervention group had a better functional ability, a higher quality of life, reduced depressive symptoms, and more efficient healthcare and social service utilizations than the comparison group at both the 3-month and 6-month intervals (all p < .05). By the end of the 6-month study, the intervention group were more satisfied with the care service linkages than the comparison group (p < .05). The positive effects of providing a categorized list of care services for care coordinators to make service linkages have been evidenced by the outcomes. The promising findings supported a further longer-term implementation of the care delivery model.

INTERVENTIONS FOR IMPROVING PSYCHOSOCIAL ADJUSTMENT IN NURSING HOME RESIDENTS: A NETWORK META-ANALYSIS
Yanyan Zhang,1 Huimin Xiao,2 and Binbin Yong,1 1. Fujian Medical University, Fuzhou, Fujian, China, 2. Fujian Medical University, Fuzhou, China

This study aimed to identify the evidence of interventions for improving psychosocial adjustment in older adults relocating to nursing homes. We followed PRISMA-NMA guidelines to conduct a network meta-analysis. 12 electric databases were used to search for eligible randomized controlled trials (RCTs) and clinical trials (CCTs) from inception to August 27th, 2019. Two reviewers independently conducted article screening, data extraction, and risk of bias appraisal with the Revised Cochrane risk-of-bias tool for RCT and Risk Of Bias for CCT. The network plots were plotted to provide a visual representation of the evidence base. Bayesian fixed-effects pairwise and network meta-analysis were exhibited in the forest plot. A Bayesian network meta-analysis was performed on 30 eligible RCTs with 2119 participants, and 12 eligible CCTs with 491 participants. The quality of the most included studies was rated as moderate in RCTs and low in CCTs. Treatment effects showed that compared to conventional treatment, group reminiscence and group counseling resulted in significant improvements in loneliness (MD: 11, 95%, CI: 2.7–17, SUCRA: 99.5%; MD: 7.7, 95%, CI: 0.53–15, SUCRA: 53.9%, respectively). Similar results were obtained for art therapy (MD: 5.5, 95% CI: 0.8–10, SUCRA: 97.3%) in self-esteem. The model fit was good, and the inconsistency was low. Group reminiscence, group counseling, and art therapy are recommended for reducing loneliness and enhance self-esteem in nursing practice.

SESSION 2929 (PAPER)

HEALTH AND HEALTH PROMOTION II

BODY MEASUREMENT AND HEALTH RISK
EDUCATION EFFECTS ON OLDER ADULTS’ HEALTH BELIEFS AND BEHAVIORS
Beatrice Gaynor, University of Delaware School of Nursing, Newark, Delaware, United States

Waist circumference (WC) measurement is an indicator of central obesity related disease risk that is rarely used in
primary care (PC). The current PC practice of body mass index (BMI) calculation to screen for disease risk lacks specificity to the older adult habitus. Guided by the Health Belief Model, this study utilized a one-way analysis of covariance to examine the effect of experimental cues, WC measurement and central obesity disease risk education, compared to control cues, BMI and obesity classification, on older adults’ health beliefs (perceived susceptibility and health benefits) and behaviors (diet and exercise) 6 weeks post cues/intervention. Of the 99 participants (control group [N=49]; experimental group [N=50]) 92% reported ‘never’ having WC measurement and 76% reported ‘never’ having BMI calculation in PC. Both groups reported high levels of perceived susceptibility and exercise at baseline. Changes in perceived susceptibility, diet, and exercise were non-significant in either group. There was a significant increase in perceived health benefits of WC measurement (p=0.01) and BMI calculation (p=0.01) in the experimental group compared to the control group. Willingness to exercise (p=0.007) significantly increased in the experimental group compared to the control group. The lack of BMI experience in both groups may have caused control cues to function as experimental cues in both groups. Thus, this study provides evidence that combined use of WC measurement, central obesity health risk education, BMI calculation, and obesity classification increase perceived benefits of body measurements and motivate physical activity in older adults over BMI and obesity classification alone.

EFFECTS OF MEDICARE DRUG SUBSIDIES ON ADHERENCE FOR DIABETICS: EVIDENCE FROM A REGRESSION DISCONTINUITY DESIGN
Alexandra Glynn, Inmaculada Hernandez, and Eric Roberts, University of Pittsburgh, Pittsburgh, Pennsylvania, United States

Out-of-pocket prescription drug costs are rapidly rising, particularly for insulin, which is a life-saving drug used by 3.1 million diabetics on Medicare. High out-of-pocket costs place an accentuated financial strain on older adults with diabetes, many of whom have low incomes, and may impede medication adherence, leading to poor health outcomes. The Medicare Part D Low-Income Subsidy (LIS) program limits drug co-pays to under $8.50 per prescription and caps out-of-pocket drug costs for lowest-income recipients (<135% Federal Poverty Level, FPL), resulting in pronounced differences in out-of-pocket costs for those with marginally different incomes. Using detailed income data from the Health and Retirement Study linked to Medicare claims (2008-2016), we employed a regression discontinuity (RD) design to isolate the effects of differences in out-of-pocket costs at eligibility thresholds for the LIS. Diabetic beneficiaries whose income exceeded the LIS eligibility threshold had lower Part D spending (~$945/year, p=0.03, n=2,367) and adherence to oral antidiabetic drugs (~8%, p=0.02). We conducted secondary analyses at the eligibility threshold for Medicaid, as individuals whose income exceeds the eligibility limit for Medicaid (100% of FPL in most states) are significantly less likely to receive the LIS. Above the Medicaid eligibility threshold (n=2,295), annual spending on insulin was $395 lower (p=0.002) and proportion of insulin use was 6% lower (p=0.04). These results suggest low-income Medicare beneficiaries who are not shielded from out-of-pocket costs via the LIS are particularly sensitive to drug costs. Policy proposals to limit out-of-pocket costs could improve medication adherence to high-cost drugs for vulnerable beneficiaries.

ENVIRONMENTAL INFLUENCES OF EXTREME HEAT ON THE HEALTH OF OLDER ADULTS: A RETROSPECTIVE STUDY
Mei Liu, Carol Buller, Barbara Polivka, Terri Woodburn, Mark Jakubauskas, and Benjamin Wolfe, 1. University of Kansas, Kansas City, Kansas, United States, 2. University of Kansas Edwards Campus, Overland Park, Kansas, United States, 3. University of Kansas, Overland Park, Kansas, United States

Studies have suggested that extreme weather events have differential effects by age. By leveraging electronic medical records, we aim to analyze the environmental influence of extreme heat on the health of older adults. From our healthcare system’s de-identified data warehouse, we extracted a retrospective cohort of 108,192 patients who were ≥65 years of age as of 1/1/2018 with pre-existing chronic conditions including diabetes, COPD, cardiovascular disease, or kidney disease. Extreme heat event period was defined as 5/1/2018 to 9/1/2018 (79 days with temperature ≥90°F; 15 days of moderately poor/poor air quality index (AQI) ≥75 values) and the comparison period was defined as 5/1/2019 to 9/1/2019 (51 days with temperature ≥90°F; 0 days with moderately poor/poor AQI values) in the Kansas City area. We randomly partitioned the study cohort into two sets and demonstrated the two patient sets were statistically similar (p=0.05) with respect to their demographic and underlying health conditions. Finally, we compared the respiratory, cardiovascular, and renal health outcomes between the 2018 and the 2019 cohorts. Most patients were Caucasians, female and had comorbid conditions. Results showed significantly higher number of all-cause emergency department visits (p=0.04) and outpatient visits (p<.001) during the extreme heat event period in 2018. Analyses also showed significantly higher number of outpatient visits due to upper respiratory diseases (p=0.008) and acute renal failure (p=0.01) in 2018. In conclusion, extreme heat increased use of healthcare services in older adults with chronic conditions.

SMOKING, BUT NOT OTHER ENVIRONMENTAL EXPOSURES, INCREASES RISK FOR ADVANCED BRAIN AGING
Nathan Whitsel, Carol Franz, and William Kremen, 1. UCSD, San Diego, California, United States, 2. University of California San Diego, La Jolla, California, United States, 3. University of California San Diego, San Diego, California, United States

Exposure to harmful substances and chemicals such as tobacco smoke, chemicals (e.g., herbicides, pesticides, Agent Orange) and metal dust has been associated with increased risk of developing cancer, cardiovascular disease, and other diseases that contribute to shorter life expectancy. Associations with brain health in relation to these exposures are less well studied. We examined the relationship between brain health and prolonged exposure to different harmful substances in 498 male participants average age 68 (range 61 to 73) from the Vietnam Era Twin Study of Aging