p<0.001) and were more active (60+ posts in recent month). Community resources and provision of social support were similarly shared through groups in both languages; advocacy was more prominent among Spanish groups (69%vs.39%, p<0.001). English pages significantly provided more social support (96% vs.65%, p<0.001), more caregiver skills (67%vs.49%, p<0.001), inspirational roles (88% vs.59%, p<0.001). Spanish pages and groups were better in providing news/research to FCG (59%vs.16%, p<0.001). Implications for research, policy or practice: Facebook provides numerous useful bilingual resources to ALS-FCG. FCG may receive social support, inspiration, training, news/research and advocacy. Further interventions need to actively improve the role of social-media in supporting bilingual ALS FCG and use it as a platform of dissemination.

# PALLIATIVE CARE... WHAT'S THAT? : MEDICAID PATIENT-IDENTIFIED BARRIERS TO PALLIATIVE CARE

Deborah Hoe,<sup>1</sup> Yu-Hsuan Wang,<sup>2</sup> Kate Meyers,<sup>3</sup> and Susan Enguidanos<sup>1</sup>, 1. University of Southern California, Los Angeles, California, United States, 2. Leonard Davis School of Gerontology, University of Southern California, Los Angeles, California, United States, 3. California Health Care Foundation, Oakland, California, United States

Multiple studies demonstrate most consumers do not know about palliative care. And, since January 2018, California's Medi-Cal Managed Care patients have been eligible for palliative care services under Senate Bill 1004 (SB 1004). Yet, the uptake of palliative care services has been underwhelming. The purpose of this study is to explore patient-centered barriers to palliative care. We recruited 27 adult Medicaid patients suffering from advanced cancer, chronic obstructive pulmonary disease, congestive heart failure, or liver disease, from community-based sites in Los Angeles, and conducted semi-structured qualitative interviews. Each participant was asked questions to elicit their knowledge about, and perspectives on, palliative care as well as their preferred communication approaches for receiving a referral to palliative care. The interviews were audio-recorded and transcribed verbatim. We used a grounded theory approach to guide our analysis of primary themes. Our findings indicated that the barriers to palliative care referrals among this population included lack of knowledge about palliative care and available services; the reliance on, and trust in, primary care physicians for information; language and cultural barriers; and patient believing they are neither old enough nor sick enough to need palliative care. This population also preferred direct contact, with in-person consultations more favorable than telephone calls. These findings emphasize the critical role primary care physicians play in advocating for safety net patients and the necessity for culturally sensitive education about palliative care. Promoting knowledge and understanding of palliative care among both primary care physicians and consumers is vital to ensuring access to care.

## INFLAMMATORY DIET PATTERN AND COGNITIVE FUNCTION IN 5 EUROPEAN COUNTRIES OVER 3-YEARS FOLLOW-UP

Patricia O. Chocano-Bedoya,<sup>1</sup> Bruno Vellas,<sup>2</sup> Reto W. Kressig,<sup>3</sup> Endel J. Orav,<sup>4</sup> Walter Willett,<sup>5</sup> and Heike A. Bischoff-Ferrari<sup>1</sup>, 1. Centre on Aging and Mobility, University of Zurich and City Hospital Waid, Zurich, Switzerland, 2. Institut des Sciences du Cerveau, de la Cognition et du Comportement de Toulouse (ISCT), Toulouse, France, 3. Felix Platter Hospital · University Center for Medicine of Aging Basel, Switzerland, Basel, Switzerland, 4. Department of Biostatistics, Harvard T.H. Chan School of Public Health, Boston, Massachusetts, United States, 5. Department of Nutrition, Harvard T.H. Chan School of Public Health, Boston, Massachusetts, United States

Diet patterns associated with low chronic inflammation may modulate cognitive decline. We investigated an empirical dietary pattern (EDP) associated with inflammation in five European countries and its association with cognitive changes over 3-years. This prospective study included 2157 community dwelling-seniors 70 years and older, followed for 3 years as part of DO-HEALTH, a randomized clinical trial. At baseline, participants completed a food frequency questionnaire and C-Reactive Protein (CRP) and interleukin-6 (IL-6) was measured. We used the Montreal Cognitive Assessment (MoCA) every year of the study. Based on reduced rank regression, we estimated a dietary pattern associated with CRP and IL-6. To evaluate the association between the EDP and cognitive changes over time, we used repeated measure linear regression models adjusting for age, total calories, BMI, study center, time, alcohol intake, education, physical activity, presence of depression symptoms, hypertension, diabetes or heart disease. The EDP was characterized by higher intakes of red and organ meat, refined grains, legumes, poultry and white fish, and lower intakes of coffee, tea, ginger, nuts and cheese. In multivariate adjusted models, participants with lowest adherence to the EDP (range -7.3 to -0.3) increased their MoCA scores 0.7 points over three years whereas those with highest adherence (range 0.4-10.1) increased their MoCA scores only by 0.2 points (p=0.01). In conclusion, a low inflammatory diet was associated with better cognitive function over time among adults  $\geq$ 70 years from five European countries. This finding supports the role of diet in the promotion of cognitive health among older adults.

# CO-DESIGNING CANCER SCREENING INTERVENTIONS WITH PEOPLE OVER 55 YEARS OLD AT RISK FOR LUNG CANCER

Leah Tuzzio,<sup>1</sup> Lorella Palazzo,<sup>1</sup> Sarah Brush,<sup>1</sup> Kelly Ehrlich,<sup>1</sup> Melissa Anderson,<sup>1</sup> Hongyuan Gao,<sup>1</sup> and Karen Wernli<sup>1</sup>, 1. Kaiser Permanente Washington Health Research Institute, Seattle, Washington, United States

In 2014, the US Preventive Task Force recommended annual lung cancer screening with low dose CT (LDCT) for adults aged 55 to 80 years old with significant smoking history. Although screening reduces lung cancer mortality, the leading cause of cancer mortality in the US, adherence to screening follow-up remains low. In a human-centered design qualitative study, health services researchers and eight adults over 55 years old from Kaiser Permanente Washington who had recently had an LDCT participated in two co-design sessions. We elicited barriers, facilitators and design principles to develop multilevel interventions that aim to improve adherence to ongoing LDCT. In the initial discussion, participants identified four key areas

for improvements to adherence: a) reminders for scheduling and appointments, b) knowledge about tests and follow-up, c) convenience in location and scheduling, and d) financial and non-financial incentives. In a second session, participants referenced patient personas and sketched storyboards, a comic striplike format showing steps in a journey, to describe different ways to help patients return for LDCTs. Through qualitative analysis, we identified ten elements to consider incorporating in multilevel interventions: versatility (e.g., multiple reminder options), social support (e.g., families, peers), individualization (e.g., tailoring to patient needs), feelings (e.g., fear, relief), knowledge (e.g., harms/benefits, expectations), responsibility (e.g., who is accountable for reminders), continuity (e.g., clear pathway to adherence), consistency (e.g., same messages), cadence (e.g., rhythm of messages), and acknowledgment (e.g., recognition of screening completion). Next steps are to incorporate feedback from clinical stakeholders and develop multilevel interventions for further testing.

## BEING WOMEN AND BEING DEMENTIA CAREGIVERS: SELF-CONCEPTS IN THE MAKING OF VIETNAMESE FEMALE CAREGIVERS

Trang T. Nguyen<sup>1</sup>, 1. Center for Studies of Displaced Populations, Tulane University, New Orleans, Louisiana, United States

In Vietnam, the majority of dementia caregivers are women. They play multiple social roles, and confront role conflicts and caregiving burdens with insufficient social supports. Dementia caregiving alters their self-concepts, or who they think they are. This paper aims to explore self-concepts of Vietnamese female caregivers of older relatives with Alzheimer's Disease (AD). In total, 21 face-to-face, semi-structured interviews, including six follow-up interviews, with 13 Vietnamese female caregivers of older patients with AD were conducted. These 13 caregivers were from 44 to 71 years old, mostly spouses of the patients with AD (n = 8), and retired (n = 9). Thematic coding procedure and the program MaxQDA12 were used for data analysis. Results show that the self-concepts of female caregivers in dementia care were complex, contextualized, and manifested in different aspects. First, self-concepts of these female caregivers were the outcome of the interactions between the guided-self and the performed-self. Their guided-self was the self that their social norms and cultural traditions told them about who they should be, while their performed-self was the self they demonstrated to the outside world. The mismatch between these two types of self caused distress among caregivers. Second, caregivers' self-concept was the combination of the three key types of the self: the moral-self (a filial daughter or a responsible wife); the feminine-self (a patient and graceful women); and the worthy-self (a devoted and helpful caregiver). Understanding Vietnamese women's self-concepts associated with their sociocultural context will better inform the development of support programs for them.

## LOSS NEGATIVELY IMPACTS A HEALTHY LIFE IN US ADULTS: FINDINGS FROM THE HEALTH AND RETIREMENT STUDY

Justin B. Ingels,<sup>1</sup> and Toni Miles<sup>2</sup>, 1. College of Public Health, University of Georgia, Athens, Georgia, United States, 2. University of Georgia College of Public Health, Athens, Georgia, United States

Previous research reports that the loss of a loved one increases the risk of mortality and physical and mental health problems. Using data from the 2004 to 2014 waves of the Health and Retirement Study, we estimate the years of healthy life (YHL) from 2004 to death for each respondent. YHL is based on the combination of years lived between 2004 and 2014, a projection of years beyond 2014, and selfrated health. Regression models stratified by age and gender were developed with the loss of a parent or spouse as the primary exposure and YHL as the dependent variable. Annual estimates of the total YHL lost associated with bereavement were based on these regression analyses and US Census data. Models reveal a strong dose-relationship between YHL lost and the number of losses. In total, the annual YHL lost associated with loss in US adults between 50 and 84 years of age is estimated at 2.0 and 1.6 million for men and women, respectively. Nearly three-fourths of the annual YHL lost are associated with adults younger than 65. Interaction analyses suggest that increasing physical activity has the greatest impact on reducing YHL lost in those with the greatest number of losses, one to two YHL per person. Understanding the full impact of loss on the lives of adults is an important step toward framing loss as a public health issue, especially for middle-aged adults. Results suggest that physical activity should be an important aspect of bereavement interventions.

#### ASSESSMENT OF A MICROPLATE SYSTEM FOR MEASURING INDIVIDUAL REAL-TIME RESPIRATION IN SMALL MODEL ORGANISMS OF AGING

Ashley N. Turner,<sup>1</sup> Jessica M. Hoffman,<sup>1</sup> Mickie L. Powell,<sup>1</sup> Melissa J. Sammy,<sup>2</sup> Douglas R. Moellering,<sup>2</sup> Tim R. Nagy,<sup>2</sup> Steven N. Austad,<sup>1</sup> and Daniel L. Smith<sup>2</sup>, 1. Department of Biology, University of Alabama at Birmingham, Birmingham, Alabama, United States, 2. Department of Nutrition Sciences, University of Alabama at Birmingham, Birmingham, Alabama, United States

The ability to measure oxygen consumption rates of a living organism in real-time provides an indirect method of monitoring dynamic changes in metabolism reflecting organismal level mitochondrial function. In this study, we assessed the Loligo Systems microplate system for measuring individual respiration in small organisms. This included adult nematodes (Caenorhabditis elegans, N2), zebrafish embryos (Danio rerio, AB), and adult fruit flies (Drosophila melanogaster, w1118). Organisms were placed inside 80 µL glass chambers on a 24-well microplate atop a 24-channel optical fluorescence oxygen reading device. Adult nematodes and zebrafish embryos were in liquid culture, M9 buffer and egg water respectively, and the adult flies were in room air. The microplate and reader were placed inside an incubator for temperature control. A silicone gasket with a thin liner was used to seal the chambers. Reference standard oxygen consumption (respiration) of single and multiple adult nematodes (n=1-4 animals/well), zebrafish embryos (n=1-4 animals/well), and adult flies (n=1-2 animals/well) in the microplate system were achieved. Significant differences across numbers of animals/well and by sex were observed. Validation experiments of the oxygen consumption rates measured in C. elegans in parallel with Seahorse extracellular flux (XF) experiments are underway. The Loligo Systems microplate system offers a non-invasive, non-destructive