patients at discharge, a high percentage were discharged to a community destination across all data elements (range of 85.9% to 97.3%). These standardized function items are also being used in other PAC settings and research implications of these validity findings will be discussed.

BARRIERS TO PALLIATIVE AND HOSPICE CARE UTILIZATION AMONG OLDER ADULTS WITH CANCER: A SYSTEMATIC REVIEW

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The number of older adults with cancer is increasing in the United States. However, palliative and hospice care are not optimally utilized by this population. This systematic review aims to identify the barriers to palliative and hospice care utilization in older adults with cancer. Literature searches were conducted using PubMed, CINAHL, Psych-Info, Embase and Cochrane Library databases. The keywords used were (cancer OR neoplasms OR oncology) AND (palliative care OR supportive care OR end of life OR terminal OR dying OR hospice) AND (barriers OR obstacles OR challenges OR difficulties). Eight research articles that examined the barriers to palliative and hospice care were identified and analyzed. PRISMA guidelines were followed for the review. The study designs were heterogeneous, including qualitative, quantitative and mixed methods. Four major barriers to palliative or hospice care were identified including misconceptions and lack of understanding of palliative care and hospice care, lack of accessibility to palliative and hospice care services, communication challenges between patients and healthcare providers, and policy and reimbursement issues. This is a pioneer study to review the barriers to palliative and hospice care utilization with focus on older adults. The findings can be used to guide intervention development to improve the use of palliative and hospice care utilization in this population.

BRAINCHECK SHOWS IMPROVED CLINICAL AND COST OUTCOMES IN MULTI-ARM RANDOMIZED CONTROLLED TRIAL

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The rapidly aging population portends an increase in the prevalence of patients with cognitive impairment and its incumbent humanistic and monetary costs to the healthcare system. BrainCheck, Inc. has developed an online point-of-care technology that is intended for the assessment and management of mild cognitive impairment (MCI) and dementia. It is comprised of a battery of digital neurocognitive tests that can be administered via iPad, iPhone or computer in about 5 minutes and has been shown to have high sensitivity and specificity. We developed a 3-arm Markov decision-analytic model to estimate the comparative cost-effectiveness of BrainCheck, usual care (UC) in the community setting and UC in a skilled nursing facility (SNF). A Markov model allows a cohort to experience different "health states" (Normal, MCI, Dementia, Death) over discrete time intervals. Outcomes were reported as incremental cost-effectiveness ratios (ICERs) between the 3 arms. The outcomes metrics were cost per quality-adjusted life years (QALYs), cost per emergency room visit/hospitalization avoided, cost per SNF admission avoided and cost per incremental

difference in Neuropsychiatric Inventory (NPI) score, based on a randomized controlled trial incorporating these 3 pathways. Influence of the 3 arms on quality of life was measured using both the EQ-5D and NPI. Resource use was collected via the Resource Utilisation in Dementia instrument. The model took a lifetime perspective and costs and effectiveness were discounted at 3%. Base-case analyses found that adopting BrainCheck delivered more QALYs for patients over their lifetime and was substantially more cost-effective than UC in both settings.

CARDIOVASCULAR DISEASE RISKS AMONG EXTREMELY HIGH HIGH-DENSITY LIPOPROTEIN CHOLESTEROL: LONGITUDINAL STUDY.

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Background: Previous studies, with one baseline measurement of HDL without considering fluctuation of HDL, suggested that those with extremely high HDL cholesterol had higher cardiovascular mortality. The aim of this study was to evaluate cardiovascular disease incidence among who had extremely high HDL cholesterol compared to those who had normal HDL cholesterol by evaluating time-dependent HDL levels among elderly people in a longitudinal study.

Methods: We conducted a retrospective longitudinal study at large academic hospital, Tokyo, Japan, from 2005 to 2016. We included all elderly patients who underwent health check-ups at the center for preventive medicine. Those patients with a prior history of cardiovascular disease were excluded. We categorized patients into 5 groups on the basis of HDL measurements: <40, 40–59, 60–79, 80–89, >90mg/dl. Our primary outcome was the development of cardiovascular disease. Longitudinal analyses by a mixed effect model with time-dependent HDL levels were applied to consider fluctuations in HDL levels within the same patients.

Results: 83,125 participants were included in this study. Median follow-up was 1,746(Interquartile range (IQR): 2,375) days, and 1,896(2.2%) developed cardiovascular diseases. The odds ratios for developing cardiovascular disease was higher among low HDL patients (1.24, 95%CI:1.01–1.54), whereas those were lower among high (0.80, 95%CI:0.71–0.91) or very high HDL (0.71, 95%CI:0.57–0.88) compared to normal HDL population. However, that among extremely high HDL was similar to normal HDL group (OR: 0.95, 95%CI:0.74–1.20).

Conclusion: In our longitudinal study, those with extremely high HDL cholesterol had similar risk for cardiovascular diseases compared to those with normal HDL level.

CARDIOVASCULAR HEALTH AND DEMENTIA INCIDENCE AMONG OLDER ADULTS IN LATIN AMERICA: RESULTS FROM THE 10/66 STUDY

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A growing body of evidence shows that cardiovascular health is associated with brain health. Little is known about this topic among older adults in Latin America, where the incidence of dementia is rising. This study aimed to assess the longitudinal association between cardiovascular health and dementia in six Latin American countries. We analyzed longitudinal data from the 10/66 study and included non-demented residents at baseline aged 65 and older in Cuba, Dominican Republic, Peru, Venezuela, Mexico and Puerto Rico ($n=6447$) who were followed-up three years later on average. A modified Life's Simple 7 index of cardiovascular health (CVH; ranging from 0 to 14) was calculated based on scores in 7 modifiable health domains: exercise, diet, smoking, waist circumference, blood pressure, fasting glucose, and fasting cholesterol. The outcome was incident dementia, which was modeled using competing risks survival analysis to adjust for risk of death. Individuals with moderate or ideal levels of CVH had 37%-52% lower dementia risk than those with poor levels. Associations were most apparent among those in the lower 50% of wealth. Moderate and ideal levels of CVH in older ages may protect against dementia.

CAREGIVERS OF OLDER ADULTS DURING CARE TRANSITIONS: INSIGHTS INTO POSITIVE ASPECTS OF CAREGIVING

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While family caregivers often play a vital role in supporting older adults transitioning from hospital to home, little is known about the caregiver experience during care transitions over time. This presentation will describe a pilot longitudinal study situated within a larger participatory action research project that examined the unique experiences of informal family caregivers of older adults in a care transition. Forty-five participants were recruited from two hospitals within a large regional health system and studied at three points in time: before hospital discharge, one week after discharge to home, and one month after discharge. Data were collected through online methods or mailed paper surveys and analyzed with descriptive statistics, Pearson bivariate correlations and paired t-tests. No significant changes were found in caregiver burden, caregiver responsibilities and competence in responsibilities, perceived social support, and quality of life. However, positive perceptions of caregiving relationship, perceived social support, and perception of health were significantly related to positive aspects of caregiving, as measured by a novel tool developed and tested in this study. This measure, the Positive and Enjoyable Aspects of the Caregiving Experience (PEACE) addressed role fulfillment, pride, gratitude, positive effects on other relationships, and personal meaning in the role of caregiver. High internal reliability ($\alpha=0.82$) was found among PEACE constructs. Findings offer insights into longitudinal methodology with caregivers recruited from hospital settings as well as policy and program development to support caregivers in their role facilitating older adult care transitions from hospital to home.

CHANGES IN OLDER ADULT FALLS, FALL INJURIES, AND FALL FATALITIES ACROSS THE UNITED STATES—2012–2016

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Falls are the leading cause of injury among adults aged 65 and older and cost \$50 billion/year in medical expenditures. The age-adjusted rate of fatal falls increased 31% nationally and in most states during the past decade. However, the corresponding change in the prevalence of self-reported falls and fall injuries is unknown and has not been compared to the increasing fall fatality rate. Any increase in the prevalence of falls would translate to a greater burden to the health-care system. Data from the 2012, 2014, and 2016 Behavioral Risk Factor Surveillance System were used to calculate fall and fall injury prevalence, controlling for age. Year-to-year differences in fall and fall injury prevalence were detected using two-sample t-tests. Data from Vital Statistics were used to calculate fall fatality rates and were age-adjusted with the 2000 U.S. Census. Joinpoint was used to determine significant change for fall fatalities from 2012–2016. State-specific estimates of fall and fall injury prevalence and fatality rates were compared to the national prevalence and rate using two-sample t-tests. From 2012–2016 the fall prevalence increased nationally and in nine states. The prevalence of fall injuries increased in five states and decreased in one but did not change nationally. The fall fatality rate increased nationally and in 17 states and decreased in 1 state. In 2016, only New Mexico had a higher prevalence of self-reported falls and fall injuries, and a higher rate of fall fatalities compared to the national average.

CHARACTERISTICS OF OLDER VETERANS ADHERENCE TO EXERCISE

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Only 23.2% of older adults (65+) in the United States achieve the recommended minutes of physical activity (PA). Research programs focused on increasing PA through supervised exercise indicate that approximately 50% of older participants drop out within the first six months. Those who complete programs are not likely to continue to exercise due to barriers. Using the Self Determination Theory, we examined the characteristics of long-term adherence to a supervised clinical exercise program during the years of 2009–2016. Survey data from the Durham VA GeroFit database were analyzed. Eligible participants ($N = 98$) completed the Barriers Specific Self-Efficacy Scale (BARSE), Short Form survey (SF-36) Physical Function Subscale, and the GeroFit Comorbidities Index. Data were analyzed using the SAS (version 9.4) and significance was set at $p < .05$. Participants were classified as adherent if they remained in GeroFit for at least 2 years. Sample characteristics were compared by participation (drop by < 2 years vs. did not drop by 2+ years) using t-tests for continuous variables and chi-square tests for categorical variables. Results indicated adherent participants had a lower BMI ($p = .0026$). However, participant status had no effect on the number of reported comorbid conditions and symptoms. The confidence total (BARSE) of participants was trending towards significance ($p = .054$), with environment contributing to the most to attrition ($p = .037$). This study is the first of its kind to identify characteristics of older participants of an exercise program who adhere to exercise over a longer period of time.