the facilitator will assist participants to continue, modify, or set a new goal. At the end participants will complete surveys about their satisfaction with the method, their results and their desire to continue with SMART goals. They will also be asked if they would like to facilitate new groups to continue the spread of peer-supported SMART goal groups. This study is designed to empower older adults to maintain or improve management of their physical, psychological, and/ or social health. It will reveal the impact of an older adult created and guided group health intervention on feelings of self-efficacy and well-being.

### OPPORTUNITIES AND BARRIERS TO MEDICATION SAFETY IN COMMUNITY-DWELLING OLDER ADULTS

Fatoumata Jallow,¹ Elisa Stehling,² Zara Sajwani,³ Kathryn Daniel,¹ and Yan Xiao,¹ 1. University of Texas at Arlington, Arlington, Texas, United States, 2. University of Tx. at Arlington, Arlington, Texas, United States, 3. The University of Texas at Arlington, Texas, United States

Community-dwelling multi-morbid older adults are a vulnerable population for medication safety-related threats. We interviewed a sample of these older adults recruited from local retirement communities and from primary care practices to learn their perceptions of barriers and enablers for their medication safety. The present study is part of the Partnership in Resilience for Medication Safety (PROMIS) study. One of the aims of this project is to identify barriers and opportunities to improve older adults' medication safety. These interviews were conducted during COVID-19 pandemic conditions. Results from this qualitative study suggest that trust between these older adults and their healthcare providers is an essential component of medication safety. Overarching themes include disruptions in medication management, caregivers caring for each other, patient safety practices or habits, and medication management literacy. Participants also shared strain due to lack of skills to navigate telemedicine visits, trust in Primary Care Providers (PCPs) and pharmacists to prescribe and dispense safely for them, reliance on PCPs and pharmacists to give essential information about medications without having to be asked. Our interviews illustrated large variations in older adults' perceived role in medication safety, with some developing expertise in understanding how medications work for them and how long-term medications should be periodically reviewed. The types of information needs and supports from PCPs were likely different. Understanding these barriers and enablers for safe medication management can help us develop medication safety improvements for this vulnerable population.

#### PULMONARY AND PHYSICAL FUNCTION LIMITATIONS IN AGING MEN WITH AND WITHOUT HIV FROM THE MULTICENTER AIDS COHORT STUDY

Mona Abdo,¹ Ken Kunisaki,² Valentina Stosor,³ Gypsyamber D'Souza,⁴ Madiha Abdel-Maksoud,¹ Todd Brown,⁵ Samantha MaWhinney,¹ and Kristine Erlandson,⁶ 1. Colorado School of Public Health, Aurora, Colorado, United States, 2. University of Minnesota Medical School, Minneapolis, Minnesota, United States, 3. Northwestern University Feinberg School of Medicine,

Chicago, Illinois, United States, 4. Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, United States, 5. Johns Hopkins School of Medicine, Baltimore, Maryland, United States, 6. Colorado School of Medicine, Aurora, Colorado, United States

We sought to determine effects of age, HIV serostatus, and smoking on the associations between pulmonary function and physical function impairments using Multicenter AIDS Cohort Study data. Associations between physical function outcomes gait speed (m/sec) and grip strength (kg) with normalized pulmonary function tests (diffusion capacity for carbon monoxide (DLCO, n=1,048) and forced expiratory volume in one second (FEV1, n=1,029)) were examined. Adjusted mixed-effects models included interaction terms to assess effect modification. 574(55%) were HIV+, with median age 57(IQR=48,64) and mean cumulative smoking pack-years 12.2(SD=19.0). 349(33%) had impaired DLCO (<80% of predicted) and 130(13%) had impaired FEV1 (<80% of predicted). Participants with impaired DLCO had weaker grip strength than those with normal DLCO (estimate= -3.5[95% CI=-4.6,-2.4]kg; p<0.001). Participants with impaired DLCO had slower gait speed than those with normal DLCO (estimate= -0.04[95% CI= -0.06,-0.02] m/sec; p=0.002). Age modified the DLCO effect on gait (p-interaction=0.01) but not grip (p-interaction=0.09). The association between decreased DLCO and slower gait was more pronounced in older participants. Smoking or HIV serostatus did not significantly modify the DLCO effect on gait (all p-interaction≥0.14) or grip (p-interaction=0.74, p-interaction=0.058, respectively). As with DLCO, participants with impaired FEV1 had weaker grip strength (estimate=-3.0[95% CI= -4.7,-1.3]kg; p<0.001) than those with normal FEV1. FEV1 was not associated with gait speed(p=0.98). Age, HIV serostatus or smoking did not modify the associations between FEV1 and gait speed or grip strength (all p-interaction>0.05). Associations between lower DLCO/FEV1 and decreased physical function suggest that interventions to improve pulmonary function may also preserve physical function with aging.

## THE IMPACT OF TOOTH RETENTION ON HEALTH AND QUALITY OF LIFE IN OLDER ADULTS

Adejare (Jay) Atanda,¹ Alicia Livinski,² Darien Weatherspoon,² Paul Fontelo,² and Shahdokht Boroumand,² 1. National Institutes of Health, Baltimore, Maryland, United States, 2. NIH, Bethesda, Maryland, United States

America is aging rapidly, and older adults (age ≥65 y) are retaining more of their natural teeth, a trend expected to continue. Although much is known about the impact of complete tooth loss on overall health and well-being, less is known about the effect of partial tooth loss. We conducted a systematic review to advance our understanding of the impact of retaining ≥20 teeth on health and quality of life (QoL) in older adults using two tooth retention concepts – shortened dental arch (SDA) and functional dentition (FD). We searched seven scientific databases from 1981–2019 for publications on tooth retention and outcomes and impact on health and QoL. Ninety-six studies were included in this review. Most were assessed with low risk of bias (n=74) and of good quality (n=73) using the revised Cochrane Risk of Bias tool and Newcastle-Ottawa Scale. Tooth retention was defined as FD in 82 studies, SDA in 10 studies,

and four studies used both. Most were cross-sectional and only seven were from the US. We found an increasing trend among published studies in using FD and SDA to describe natural dentition retention (50 articles in 2015-19 vs one in 1995-99). In general, having <20 teeth was associated with increased likelihood for functional dependence, onset of disability, declines in higher-level functioning, and lower QoL. New information is needed to facilitate clinical decision-making, care-giving, and to help health providers better meet the future oral health needs of an aging US population.

## USING HEALTH-RELATED QUALITY OF LIFE TO IDENTIFY THE INCIDENT CARDIOVASCULAR DISEASE RISK

Aung Zaw Zaw Phyo,¹ Joanne Ryan,² David A. Gonzalez-Chica,³ Nigel P. Stocks,³ Christopher M. Reid,² Andrew M. Tonkin,² Robyn Woods,² and Rosanne Freak-Poli,² 1. Monash University, Melbourne, Australia, Melbourne, Victoria, Australia, 2. Monash University, Melbourne, Victoria, Australia, 3. University of Adelaide, Adelaide, South Australia, Australia

Previous studies have revealed that poor health-related quality of life (HRQoL) is associated with a higher risk of hospital readmission and mortality in patients with cardiovascular disease (CVD). The association between HRQoL and incident CVD is still limited for general older people. This study explored the associations between baseline HROoL and incident and fatal CVD in community-dwelling Australian and the United States older people enrolled in ASPREE clinical trial. A cohort of 19,106 individuals aged 65 to 98 years, who were initially free of CVD, dementia, or disability, were followed between March 2010 and June 2017. The SF-12 questionnaire was used to assess HRQoL, and the physical (PCS) and mental component scores (MCS) of SF-12 were derived using norm-based methods. Incident major adverse CVD events included fatal CVD (death due to atherothrombotic CVD), hospitalizations for heart failure, myocardial infarction or stroke. Analyses were performed using Cox proportional-hazard regression. Over a median 4.7 follow-up years, there were 922 incident CVD events, 203 fatal CVD events, 171 hospitalizations for heart failure, 355 fatal or nonfatal myocardial infarction and 403 fatal or nonfatal strokes. A 10-unit higher PCS, but not MCS, was associated with a lower risk of incident CVD (HR=0.86, 95%CI 0.79-0.92), hospitalization for heart failure (HR=0.72, 95%CI 0.60-0.85), and myocardial infarction (HR=0.85, 95%CI 0.75-0.96). Neither PCS nor MCS was associated with fatal CVD events or stroke. Physical HRQoL can be used in combination with clinical data to identify the incident CVD risk among community-dwelling older people.

### Session 9030 (Poster)

### Aging and Chronic Health Conditions II

ASSOCIATION OF BODY COMPARTMENT SHRINKAGE WITH SUBSEQUENT HEALTH CARE UTILIZATION IN OLDER MEN

John Schousboe, <sup>1</sup> Lisa Langsetmo, <sup>2</sup> Allyson Kats, <sup>3</sup> Brent Taylor, <sup>3</sup> and Kristine Ensrud, <sup>3</sup> 1. Park Nicollet Clnic /

HealthPartners, Minneapolis, Minnesota, United States, 2. University of Minnesota, University of Minnesota, Minnesota, United States, 3. University of Minnesota, Minneapolis, Minnesota, United States

Both height loss and weight loss among the very old are associated with adverse health outcomes including fractures and mortality. However, it is not clear whether the associations between weight loss and health outcomes are attributable to specific compartmental (fat vs. fat-free) loss or whether they are attributable to overall shrinkage. Our objective was to estimate the associations of compartmental loss and height loss with subsequent total health care costs, acute hospitalizations, and skilled nursing facility (SNF) stays over a three-year follow-up period, adjusted for each other and important covariates (age, race, multimorbidity, IADL impairment, depressive symptoms, walk speed). Our analytic cohort was 1505 older men (mean [SD] age 79.3 [5.2] years) who attended the 3rd Osteoporotic Fractures in Men (MrOS) study visit (V3) and who were enrolled in Medicare Fee for Service (FFS). Annualized changes in fat-free and fat mass (measured with dual-energy x-ray absorptiometry) and height were assessed over a mean (SD) 6.8 (0.3) years prior to V3. Total health care costs, acute hospital stays, and SNF stays were ascertained during 3 years after V3 using linked Medicare FFS claims files. Fat-free mass loss (per SD) was associated with total health care costs (cost ratio 1.10, 95% CI 1.01, 1.19), but not with acute hospital or SNF stays. Fat mass loss and height loss were not associated with health care utilization outcomes after multivariable adjustment. Loss of fat-free mass is modestly associated with higher total health care costs after accounting for age, race, multimorbidity, and IADL impairment.

# ASSOCIATION OF OBESITY, MULTIPLE CHRONIC CONDITIONS, AND FRAILTY: THE NATIONAL HEALTH AND AGING TRENDS SURVEY

John Batsis,¹ Christian Haudenschild,² Anna Kahkoska,³ rebecca Crow,⁴ David Lynch,⁵ Curtis Petersen,⁶ and Matthew Lohman,ⁿ 1. University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, United States, 2. University of Minnesota, University of Minnesota, Minnesota, United States, 3. University of North Carolina at Chapel Hill, University of North Carolina at Chapel Hill, North Carolina, United States, 4. VA White River Junction, White River Junction, Vermont, United States, 5. University of North Carolina, Chapel Hill, North Carolina, United States, 6. Dartmouth College, Lebanon, New Hampshire, United States, 7. University of South Carolina, Columbia, South Carolina, United States

As life expectancy increases, so does the risk of developing multiple chronic conditions (MCC). This is concerning as there is a growing obesity epidemic in older adults which is also associated with developing chronic diseases. Both obesity and MCC also increase the risk of frailty, yet the intersection of the three is not well understood. We evaluated the relationship between obesity, multimorbidity, and frailty using data from adults ≥65 years from the National Health and Aging Trends Survey. Obesity was classified using standard body mass index categories (e.g., ≥30kg/m2) and waist circumference (WC; females≥88cm; males≥102cm). MCC was classified as having ≥2 chronic conditions.