

strata, the greater their odds of cognitive impairment in later life (OR=1.02; 95% CI=1.00, 1.05). However, though greater occupational complexity with data (OR=1.11; 95% CI=1.03, 1.19) and with people (OR=1.10; 95% CI= 1.03, 1.19) was found to be protective of cognitive decline as expected, greater occupational complexity with things was associated with greater decline (OR=0.98; 95% CI=0.93, 1.04). Given the cross-sectional nature of the present study, further longitudinal work is needed to ascertain what is driving these results.

## HOW NETWORKS OF MEDICARE BENEFICIARY PATIENT TRANSFERS AFFECT HOSPITAL C. DIFFICILE OUTBREAK RISK

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*Clostridium difficile* (CDI) is the most common healthcare associated infection (HAI), and it causes particularly high morbidity and mortality among older adults. While risk factors for this deadly HAI have been explored at the patient and facility levels, less is known about transmission between facilities. Recent literature suggests that more patient transfers to a hospital are correlated with elevated CDI levels. However, this work excludes skilled nursing facilities (SNFs), although SNFs are a major contributor of older adult patients to hospitals. We use multiple large data sets to make progress in filling several existing knowledge gaps. First, we construct and analyze healthcare facility networks using transfers of Medicare beneficiaries in the Minimum Data Set 3.0 and Medicare claims data from New Mexico, New York, Connecticut, and Colorado. We evaluate the role of SNFs in networks through the volume and frequency of patient flows in and out of individual hospitals. We also assess the level of interaction (i.e., transfers) between facilities of different sizes, locations, and types. Second, using the Healthcare Cost and Utilization Project State Inpatient Databases, we examine whether a hospital CDI outbreak is predictive of CDI incidence across a network of hospitals, using multiple existing metrics of CDI incidence, noting strengths and weaknesses for each. These two aims lay the foundation for future work to examine the relationship between patient transfers and the distribution of outbreaks. Such work may be able to identify facilities that present the greatest CDI risk to older adults across a facility network.

## BODY COMPOSITION ACROSS THE LIFESPAN IN AFRICAN CARIBBEAN MEN: FINDINGS FROM THE TOBAGO LONGITUDINAL STUDY OF AGING

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Body composition changes vary by age and ethnicity and have a major impact on health and physical function. However, little is known about the magnitude, tempo and patterns of these changes in African-ancestry populations,

particularly outside the U.S. Thus, we examined age-specific rates-of-change in lean and fat mass in a unique population-based, longitudinal cohort study of 2621 African-ancestry men on the Caribbean island of Tobago (age: 62.0±11.8 years, range: 32-99 years). Body composition was measured with DXA at study entry and after an average of 4 and 9 years. Annualized rates of change and 95% confidence intervals were calculated using all 3 time-points with Generalized Estimating Equations stratified by 5-year baseline age-groups. Lean mass declined at a fairly constant rate in age-strata up through age ≤64 years (-0.72; -0.76, -0.67%/yr), but accelerated to -0.92 %/yr (-1.02, -0.82 %/yr) among those aged 65-69, and to -1.16 %/yr (-1.30, -1.03 %/yr) among those aged 70-74 years – plateauing in those aged 75+. This pattern of age acceleration was observed in arm but not leg lean mass. The age-specific rates of decline in lean mass in this cohort of African Caribbean men appear to be lower than those reported in older African American men. In contrast to lean mass, fat mass increased by 2.93 %/yr (2.72, 3.15 %/yr) and this rate of increase was fairly uniform across the lifespan. Additional research is needed to better define the lifestyle, medical and biological factors contributing to body composition changes across the lifespan in African-ancestry populations.

## TEMPORAL TRENDS IN INCIDENCE RATES OF VISION IMPAIRMENT AMONG MIDDLE-AGED AND OLDER CHINESE

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This study aimed to investigate temporal trends in the incidence rates (IRs) of vision impairment (VI) and explore its associated factors among middle-aged and older Chinese. Data were obtained from China Health and Retirement Longitudinal Study (CHARLS, 2011-2015) and Chinese Longitudinal Healthy Longevity Survey (CLHLS, 1998-2014). There were 20,467 participants with a mean age of 57.4 years from CHARLS and 21,210 participants with a mean age of 90.0 years from CLHLS. Distance and near vision were self-reported in CHARLS and performance-based vision was assessed in CLHLS. Crude and age-adjusted IRs per 1,000 person years (PY) of distance vision impairment (DVI), near vision impairment (NVI) and both distance and near vision impairment (DNVI) in CHARLS and VI in CLHLS were calculated for each wave of surveys. Risk factor adjusted temporal trends in the incidence were examined using regression models. Age-standardised IRs for DVI, NVI and DNVI significantly decreased from 79.4 to 41.2, 95.1 to 48.0 and 40.0 to 21.3 (P < 0.001) from 2013 to 2015, respectively. Male gender, higher education, no ADL disability, no depression, no multimorbidity were associated with lower IRs of DVI, NVI or DNVI. Younger age was associated with lower IRs of DVI and DNVI but higher IRs of NVI. Age-standardised IR of VI significantly decreased from 131.6 to 71.9 (P = 0.010) from 2000 to 2014, and higher education and living in the South were associated with lower IR of VI. Future studies may further investigate the causality of such phenomenon.