RACIAL-ETHNIC DISPARITIES IN ATTITUDES TOWARD PASSIVE AND ACTIVE EUTHANASIA
Sara M. Moorman1, 1. Boston College, Chestnut Hill, Massachusetts, United States

This paper examined racial/ethnic differences in opinions about passive euthanasia (withdrawing or withholding treatment), suicide, and physician-assisted suicide. Data came from 1,832 participants in the 2013 Pew Religion and Public Life Project. Respondents from all racial/ethnic backgrounds were most likely to favor multiple forms of euthanasia. However, persons of color had a wider variety of opinions about euthanasia than did non-Hispanic whites. In multivariate multinomial logistic regressions, non-Hispanic whites had a 63% chance of approving broadly of euthanasia, while non-Hispanic blacks had a 40% chance, and Hispanics, a 49% chance. Opposition to euthanasia was most common among people with multiple disadvantages (e.g., educational attainment, immigrant status). Neither trust in health care providers nor recent experience with the death of a loved one explained these group differences. Results highlight large differences of opinion between the people who set policy and practice guidelines and those who lack this power and access.

A FAIRNESS LENS TO LATER-LIFE PLANNING
Marlene Stum1, 1. University of Minnesota, St. Paul, Minnesota, United States

Being “fair” is often a desired goal when individuals are planning for financing future care, leaving an inheritance, and selecting an attorney-in-fact for financial and/or health care. However, differing perceptions about the fair use of an older parent’s resources (paying for formal care, leaving an inheritance, compensating family caregivers, rewarding a sense of entitlement), and issues of who can or should be involved in decision processes, can lead to avoiding planning and be a source of family conflict. The complexities of fair decision rules for distributing resources, and important criteria for determining fair decision processes will be discussed, guided by interpersonal social justice theories, and findings from a qualitative study of inheritance involving older adults and adult children from the same family system (N= 18). Implications for helping family members, and professionals working with them, navigate “being fair” and increase later life planning will be shared.

SESSION 2240 (SYMPOSIUM)
LEVERAGING ANALYTIC METHODS TO EXPAND OPPORTUNITIES IN AGING-RELATED HEALTH DISPARITIES RESEARCH
Chair: Igor Akushevich, Duke University, Durham, North Carolina, United States
Co-Chair: Carl V Hill, NIH/National Institute on Aging, Bethesda, Maryland, United States
Discussant: Heather E. Whitson, Duke University Medical Center, Durham, North Carolina, United States

The objective of the Symposium is to improve the understanding of how existing analytic methods and data can be leveraged to make progress in understanding the causes and mechanisms of health-related disparities in Alzheimer’s disease, related dementias and other prominent age-related diseases. Topics will cover a range of academic and administrative topics including: i) advanced analytic methods and modeling of health disparities with application to racial and geographic disparities in AD/ADRD; ii) the role of repeated anesthetic and surgical exposure in generation of disparities in AD/ADRD risk; iii) the nature of health disparities in cognitive aging as parallel to or distinct from health disparities in patterns of aging in other systems in the body; iv) recent advances in machine learning applied to large claims databases involving medical disparities; and v) geographic-related disparities in life expectancy across the U.S. A focus will be made on demonstrating how studies using established administrative data resources such as Medicare claims databases combined with innovative analytic approaches such as partitioning analyses, time-series based methods of projection and forecasting, and stochastic process models can be used to uncover previously overlooked or understudied aspects in this area of research. Analyses of such increasingly available large health datasets provides an opportunity to obtain nationally representative multiethnic results based on individual-level measures that reflect the real care-related and epidemiological processes ongoing in the U.S. healthcare system and allows the targeting of relatively rare diseases in relatively small population subgroups.

USE OF ANALYTIC METHODS AND MEDICARE DATA IN THE ANALYSES OF DISPARITIES IN AD/ADRD HEALTH OUTCOMES
Igor Akushevich,1 Arseniy Yashkin,2 Svetlana Ukrainsteva,1 and Anatoliy Yashin1, 1. Duke University, Durham, North Carolina, United States, 2. Duke University, Durham, NC, North Carolina, United States

We demonstrate how application of analytic approaches developed in demography, biodemography, epidemiology, and population studies to Medicare and Medicare-linked data allows to identify causes and mechanisms of disparities in AD/ADRD. Our studies i) confirmed geographic disparities in AD mortality (e.g., existence of hot spots, West-East gradient) but did not detect them in Medicare data, ii) confirmed racial disparities in AD/ADRD incidence and survival (e.g., higher incidence and better survival in Black population) and demonstrated that they can be partly explained by heterogeneity in diagnosis severity and partly by genetic factors, iii) detected unexpectedly strong effects of systemic hypotension, chronic kidney and liver diseases on the risk of AD/ADRD. We concluded that further progress in understanding of mechanisms and causes of the disparities in AD/ADRD is possible by clarifying the role of cause-of-death coding, the effects of comorbidity and their treatment, dynamics in cognition scores before AD/ADRD diagnosis, and genetic factors.

DISPARITIES IN ALZHEIMER’S DISEASE: THE ROLE OF REPEATED ANESTHETIC AND SURGICAL EXPOSURE
Miklos D. Kertai1, 1. Vanderbilt University Medical Center, Nashville, Tennessee, United States

Annually, there are 7 million patients > 65 years who undergo noncardiac surgery in the US. This number is expected to increase by 30% over the next 3 decades, and given the prevalence of surgically correctable comorbidities, the elderly will continue to undergo multiple surgical procedures. Currently, it is unclear what factors initiate or promote the development of Alzheimer’s disease (AD). Preclinical studies
suggest that exposure to anesthesia and/or surgery could be one of the environmental exposures that increase AD risk through neuroinflammation and neuroapoptosis. However, previous studies indicated substantial disparities in AD risk by gender, ethnicity, and race, but failed to explore the role of anesthesia and/or surgery exposure in the risk for AD. This presentation will review the role of disparities and anesthesia and/or surgery exposure in the risk for AD in elderly surgical patients.

TESTING HEALTH DISPARITIES IN COGNITIVE AND BIOLOGICAL AGING IN OLDER ADULTS IN THE UNITED STATES
Daniel Belsky, 1. Columbia University Mailman School of Public Health, New York, New York, United States

We conducted analysis to test if health disparities in cognitive aging were parallel to or different from health disparities in patterns of aging in other systems in the body, and if race/ethnicity-related disparities could be accounted for by differences in socioeconomic circumstances across the life-course. We analyzed data from more than 10,000 adults participating in the US NHANES and US Health and Retirement Study. We measured cognitive aging using neuropsychological tests of processing speed and memory. We measured aging in other systems using composite indices of biological aging based on organ-system function tests and blood chemistries. We conducted analysis to (i) quantify and compare health disparities in cognitive aging and biological aging; (ii) test if individuals exhibiting accelerated cognitive aging were also exhibiting accelerated biological aging; and (iii) test if race/ethnic disparities in cognitive and biological aging could be explained by measured socioeconomic resource differences in childhood and later life.

MACHINE LEARNING APPROACHES TO ENHANCE CLAIMS DATA ANALYSES
Ricardo Pietrobon, 1 and David Marcozzi, 2. SporeData Inc, Durham, North Carolina, United States, 2. University of Maryland, Baltimore, Maryland, United States

This presentation will cover recent advances in machine learning applied to large claims databases involving medical disparities. First, we will describe methods involving the enrichment of existing claims data with social determinants of health from census data, where variables are imputed from one dataset to another, ultimately resulting in clinical models with enhanced predictive performance. Second, we will discuss the inclusion of variables representing imaging signs from MRI and CT exams, presenting large scalability and interobserver reliability, representing a method that can be used to enrich large state and national registries through the use of image recognition. Finally, we will discuss novel protocols for Natural Language Processing involving a combination of rule-based creation of corpora for radiology and discharge reports, with highly accurate deep learning methods for concept extraction and classification.

GEOGRAPHIC DISPARITIES IN LIFE EXPECTANCY AND MORTALITY IN THE U.S.
Julia Kravchenko, 1 and H Kim Lyerly, 2. Duke University School of Medicine, Durham, North Carolina, United States, 2. Duke University Medical Center, Durham, North Carolina, United States

Although the US has one of the highest per-capita health expenditures in the world, it noticeably lags behind a number of other industrialized countries in terms of life expectancy (LE). These disparities remain unexplained by individual demographic, socioeconomic, and healthcare factors. Analysis of death certificates for 1999-2016 revealed that diseases contributed most to LE variability are myocardial infarction (explained 12.9% of the difference in mortality), heart failure (10.6%), stroke (8.2%), lung cancer (7.5%) and COPD (7.2%). Analysis of histories of diseased patients in Medicare records showed that septicemia (15.7%), low weight (13.8%), renal disease (13.3%), disorders of electrolyte and fluid balance (9.0%) and heart failure (7.3%) contributed most to the disparities. Diseases that substantially contribute to disparities in LE in the US include both common and less-often-discussed diseases. Future studies of variations in treatment patterns, access-to and quality-of medical care for these diseases could provide important insight in observed patterns.

SESSION 2245 (SYMPOSIUM)

M. POWELL LAWTON AWARD LECTURE
Chair: Sharon Inouye, Harvard Medical School Aging Brain Center, Boston, Massachusetts, United States

The M. Powell Lawton Award is presented annually to an individual who has made outstanding contributions from applied research that has benefited older people and their care. The lecture will be given by the 2018 recipient, Carol Whitlatch, PhD, Benjamin Rose Institute on Aging. The session will also include the presentation of the 2019 Lawton Award. The 2019 Lawton Award recipient is Barbara Resnick, PhD, CRNP, FGSA, of the University of Maryland. Supported by the Polisher Research Institute of the Madlyn and Leonard Abramson Center for Jewish Life.

FOLLOWING IN THE FOOTSTEPS OF A GREAT APPLIED GERONTOLOGIST (WHILE SIMULTANEOUSLY FORGING YOUR OWN PATH)
Carol Whitlatch, 1. Benjamin Rose Institute on Aging, Cleveland, Ohio, United States

Dr. M. Powell Lawton was an inspirational and productive scholar whose work had application for improving personal care and well-being for older adults and their families. He held strong to the principles of Person- and Family-Centered Care long before this terminology and model of care was commonly practiced. He was a living example of PFCC always wearing comfortable clothes and shoes to ensure his unique creativity was not obstructed by physical discomfort. Dr. Lawton’s work has inspired countless gerontologists who have taken the next steps towards ensuring quality of care by understanding personal preferences, activities, and care values. Dr. Whitlatch will discuss Dr. Lawton’s ongoing influence on care and best practices focusing on her own research that gives voice to the care values, preferences, and activities of families facing early-stage dementia. Dr. Whitlatch encourages attendees to wear their most comfortable shoes to the lecture in honor of Dr. Lawton.