quarterly per-prescription reimbursements were defined as total reimbursement amounts divided by total prescriptions. The market shares were calculated based on the proportion of total prescription numbers. RESULTS: The total reimbursement for AEDs increased from $1.6 million in 1991 to $156 million in 2004, and dropped to $1.86 million in 2005. Prescriptions for AEDs increased from 34,410 to 9,406,979 in 2004, and then dropped to 52,093 in 2008. The ergot prices increased from 25,540 in 1991 to 47,543 in 1995, then gradually decreased to 6,367 in 2008. A similar utilization trend was found for ergot combination products. Meanwhile, triptan prescriptions increased from 23,525 in 1991 to 912,978 in 2004, and dropped to 24,922 in 2008. The market share for triptans increased dramatically from 0% in 1994 to 7% in 2008, while the market share for ergot and ergot combination products decreased from 45% and 35% in 1991 to 1% and 2% in 2008. The percentage of per-prescription costs paid for brands of different intervention scenarios. Preventing Alzheimer’s disease will increase life expectancy and quality of life. However, these health benefits will increase government spending as increased longevity results in longer outlays of annuities and health spending.

PROJECTING THE BURDEN OF ALZHEIMER’S DISEASE AND EVALUATING THE POTENTIAL IMPACTS OF PREVENTING ALZHEIMER’S DISEASE IN THE UNITED STATES

National Bureau of Economic Research, Cambridge, MA, USA, University of Southern California, Los Angeles, CA, USA,*the RAND Corporation, Santa Monica, CA, USA,*the Pardee RAND Graduate School, Santa Monica, CA, USA

OBJECTIVES: Alzheimer’s disease is the sixth-leading cause of death in the United States. The health and economic costs associated with the disease are enormous. We forecast and quantify this burden until year 2050 and evaluate the potential impacts of delayed onset of Alzheimer’s disease. METHODS: We use a dynamic microsimulation model to predict health status (Alzheimer’s disease as one of multiple measures) and economic situations of Americans 30 years and older, from year 2004 to 2050. To estimate the burden of Alzheimer’s disease, we estimate a scenario in which there is no incidence of Alzheimer’s disease and compare outcomes with projections of the status-quo over four years. We evaluate the implications of delayed treatments to delay the onset of Alzheimer’s disease, we run three scenarios in which there is 2-year, 4-year, or 6-year delay of onset of Alzheimer’s disease. The main data sources are the Health and Retirement Study and the Aging, Demographics, and Memory Study. The health outcome measured is Quality-Adjusted Life Years. Economic outcomes include earnings and tax revenues, health care costs and long-term care costs (total, Medicare, Medicaid), opportunity costs for unpaid caregivers, and Social Security outlays. RESULTS: The population with Alzheimer’s disease will increase by more than 150 percent in year 2050. Relative to the status-quo, eliminating end-of-life tax revenues, and reduce cumulative Medicare costs. Alternatively, cumulative Medicaid spending and Social Security benefits would increase, outweighing the savings in Medicare spending and raised tax revenues. We will also present the gains in QALYs and savings in unpaid care giving under different intervention scenarios. CONCLUSIONS: Preventing Alzheimer’s disease will increase life expectancy and quality of life. However, these health benefits will increase government spending as increased longevity results in longer outlays of annuities and health spending.

SOCIODEMOGRAPHIC PATTERNS OF INSOMNIA DRUG PRESCRIPTIONS

La U. Boyer 1, Chun L2
Nova Southeastern University, Ft Lauderdale, FL, USA,*Kaohsiung Medical University, Kaohsiung, Taiwan

OBJECTIVES: Insomnia is the most common sleep complaint worldwide. Our study aims to identify physician and patient characteristics likely to influence insomnia prescription patterns. METHODS: The project utilized data from National Ambulatory Medical Care Survey, conducted by the US. Department of Health and Human Services. The study subjects were selected from 2006 outpatient visits in which at least one frequently used insomnia medication was prescribed. A series of population-based descriptive analyses were used to estimate the national weighted frequencies of selected insomnia drug prescriptions. We further constructed a weighted logistic regression model to estimate the odds ratio and marginal probabilities of covariates toward predicting insomnia drug prescriptions. RESULTS: Among the 90,327 million outpatient visits that took place in the US in 2006, an estimated 21.07 million visits included at least one insomnia drug prescription. The results from a multivariate logistic regression showed that a patient’s race and age, physician’s clinic ownership, type of office setting, and employment status were significantly associated with insomnia drug prescriptions. Black patients were 2.4 times more likely to receive insomnia prescription than were white patients (OR = 2.4; 95% Wald CI (1.26–4.69)). Older patients were more likely received insomnia prescription than were younger patients. Patients with 3–5 visits over the course of 12 months received fewer insomnia prescription than did patients with only 1 visit (OR = 0.44; 95% Wald CI (0.21–0.93)). Physicians who worked in the academic health center prescribed fewer insomnia drugs than did physicians who worked in the private practices (OR = 0.29; 95% Wald CI (0.09–0.91)). Employed or contracted physicians prescribed a significantly higher number of insomnia drugs than did owner physicians (OR = 3.6; 95% Wald CI (1.87–6.78)). CONCLUSIONS: Our findings indicate various sociodemographic disparities in the use of insomnia prescriptions. The study also demonstrated a comprehensive analytical framework, which is especially applicable to population-based data mining research.