the positive response ratio was calculated by dividing the number of patients who followed the pharmacist advice to total number of patients to whom the advice was provided. The cost saving per patient per year was determined from available literature.

RESULTS: A total of 180 interventional were made by the pharmacists. Patient management (60.0%, 55.5%) and drug therapy (21.0%, 41.8%) were the most frequent. The most accepted interventions were glaucometer training (2 cases, 100%), advising to correct hyperglycemic/hyperglycemic episodes (12, 66.7%), and instructing on the proper use of their injectables (5, 60.0%). Cost savings of $1914 average patient/year were estimated as a result of the 4th and 5th interventions. Also, interventions 1, 2 and 3 resulted in cost-saving of $1161.5, $1203, and $1513 per patient respectively. CONCLUSIONS: Our model showed that pharmacist interventions can result in significant cost savings among diabetic patients.

PODIUM SESSION IV: MEDICARE STUDIES II

MD5

PREDICTORS OF ENROLLMENT IN MEDICARE PART D: A SURVEY OF MEDICARE BENEFICIARIES RATIONALE, DESIGN, AND METHODS

Chambers J, Neumann P Jr, Boston Mj

1Boston Health Economics, Inc., Waltham, MA, USA; 2Tufts Medical Center, Boston, MA, USA

OBJECTIVES: The initiation of Medicare Part D in 2006 offers an ideal opportunity to study real-world decision-making and the role of adverse selection and other factors in insurance enrollment. Our objective was to identify predictors of Part D enrollment among individuals with a range of health conditions and insurance designs.

METHODS: The sample included all individuals in both the 2003 and 2006 Medical Expenditure Panel Survey (MEPS) data linked to Medicare (Medicare-MEPS) datasets who were enrolled in Medicare, as of December 2005. A multivariate logistic regression was used to assess the effects of sociodemographics, health status, 2005 supplemental insurance coverage, and 2005 person-level out-of-pocket (OOP) drug expenditures on the likelihood of enrolling in Part D in 2006. MEPS sample weights were used to calculate standard errors.

RESULTS: Of 1,436 persons who met inclusion criteria, 657 (45.4%) enrolled in Part D during 2006. Compared to the non-Part D group, the Part D group was slightly older, had more non-whites, rural residents, and unmarried individuals, and was slightly less educated and poorer. The Part D group had more beneficiaries with Medigap coverage only (17.2% vs. 5.7%), fewer with employer-based coverage only (18.3% vs. 37.1%), and more with no private supplemental insurance (46.1% vs. 32.1%). In multivariate analyses, significant positive predictors of Part D enrollment were having Medigap supplemental insurance only (OR: 1.19; 95% CI: 1.25–3.19) and OOP drug expenditures ≥$2000 in 2003 (OR: 1.58; 95% CI: 1.03–2.41). Most beneficiaries with employer-based coverage in 2005 maintained that coverage in 2006 (91.8%). CONCLUSIONS: Based on first-year data, only the sickest beneficiaries enrolling in Part D and employers withdrawing drug benefits to retirees seem to have been unanticipated. Existing coverage and high prior drug spending drove the decision to enroll in Part D in what appears to have been a rational way.

MD6

PREDICTORS OF UTILIZATION OF ACE INHIBITORS AND ANGIIOTENSIN II RECEPTOR BLOCKERS AMONG MEDICARE PART D ENROLLEES WITH DIABETES

1Thomas E, Flick PT, Bhargava S, Sivasubramaniam PV, Perlis RH, 1000 beds

University of Mississippi, University, MS, USA

OBJECTIVES: The objectives were to describe angiotensin-converting enzyme inhibitors (ACEI) and angiotensin II receptor blockers (ARB) use among Medicare Part D enrollees with diabetes with the goal of identifying patient characteristics that predict ACEI/ARB utilization.

METHODS: This is a longitudinal retrospective cohort study. The study sample included Medicare Part D enrollees from 6 states (Alabama, California, Florida, Mississippi, New York, and Ohio) aged 18 years or older with the diagnosis of diabetes. Medicare Part D claims data for the first 6 months of 2006 were evaluated for any utilization of ACEI/ARB. The outcome of interest was the percentage of at least one claim for an ACEI or an ARB during the first half of 2006. RESULTS: A total of 1,888,682 patients met our inclusion criteria. Mean age (±SD) was 71.6 (±11.6) years, 59.5% were female, and 66.4% were white. Approximately 58.8%, 5.5% had coexisting hypertension, nephropathy, and hypertension + nephropathy. Overall, 56.9% were receiving ACEI/ARB therapy. Logistic regression indicated that patients with coexisting hypertension + nephropathy were 72% and 36% more likely to use ACEI/ARB compared to patients without hypertension and nephropathy. However, patients with nephropathy were 24% less likely to receive ACEI/ARB therapy. Females, older patients, and patients of non-white races were also more likely to use ACEI/ARB. Patients with myocardial infarction, sleep apnea, coronary artery disease, retinopathy or heart failure were more likely to have used ACEI/ARB, while the opposite was true for those with hypercholesterolemia, peripheral vascular, cerebrovascular, or chronic obstructive pulmonary diseases. All results were statistically significant at P = .0001 level. CONCLUSIONS: Less than 60% of Medicare Part D enrollees with diabetes received ACEI/ARB therapy. Several patient characteristics can predict ACEI/ARB use. Opportunities exist for quality improvement interventions that could increase the outcomes for high-risk patients.

MD7

DOES MEDICARE HAVE AN IMPLICIT COST-EFFECTIVENESS THRESHOLD?

Chamber J, Neumann P Jr, Boston Mj

1Mapcara, Boston, MA, USA; 2Tufts Medical Center, Boston, MA, USA; 3Tufts University, Boston, MA, USA

OBJECTIVES: Despite the huge cost of the program, the Centers for Medicare and Medicaid Services (CMS) maintains that cost-effectiveness is not considered in national coverage determinations (NCDs) for medical technologies. Our objective was to assess the current effectiveness of technologies that are the subject of Medicare’s NCDs in order to investigate whether an implicit cost-effectiveness threshold exists. In addition, we explored whether CMS has cited cost-effectiveness evidence in NCDs.

METHODS: We reviewed NCD decision memos from 1999 through 2007 (n = 103). A line-by-line review was conducted on each coverage decision to find relevant economic evaluations. The economic evaluation that best represented each coverage decision was included in a review of the cost-effectiveness of medical technologies considered in NCDs. RESULTS: Sixty-four coverage decisions were identified from 103 decision memos. Fifty were associated with a positive coverage decision and 14 with a
Abstracts

M52 COMBINING THE SF-36 PHYSICAL FUNCTION SCALE AND THE HEALTH ASSESSMENT QUESTIONNAIRE TO IMPROVE MEASUREMENT OF PHYSICAL FUNCTION RHEUMATOID ARTHRITIS (RA): RESULTS FROM THE PREMIER STUDY
Hammond G1, Yurts A1, Kasminski M1, Roy S1, Cifaldi M1
1Quantiphi Incorporated, Lincoln, RI, USA; Abbott Laboratories, Abbott Park, IL, USA

OBJECTIVES: RA clinical studies using the SF-36 Physical Function (PF) scale and Health Assessment Questionnaire (HAQ) have identified limitations in each instrument's sensitivity across the full range of disease severity. Item Response Theory (IRT) estimates were used to develop a composite of both instruments (PF–HAQ) to provide a more sensitive measure of physical health. METHODO: Data from 799 patients from a 2-year randomized control study of adalimumab in early RA (<3 years) were employed. Patients received adalimumab plus methotrexate; adalimumab monother-apy; or methotrexate monotherapy. Composite PF–HAQ scores were compared indivi-ually with PF and HAQ using 1) comparison of floor and ceiling, and 2) ANCOVA models with ACR criteria classification or treatment as factors (covariates: sex, age, BMI); and 3) receiver operating characteristics (ROC) analyses using ACR50 criteria as a gold standard. RESULTS: At baseline, 62.6% of patients were at floor for the ACR50% of HAQ and PF scores only, included antiedpressants, antidepressants, benzodiazepines and barbiturates. In addition to evaluating overall out of 6 patients, we found no clear evidence of an implicit constant fixed cost-effectiveness

M53 THE IMPACT OF COMPLIANCE WITH BIOLOGIC THERAPY ON CLINICAL OUTCOMES IN PATIENTS WITH RHEUMATOID ARTHRITIS
Tang B1,2, Farmer RS1, Freeman D1, Wagner S1, Pech C1
1Cincoor Ortho Biotech Services, LLC, Horsham, PA, USA; 2Consumer Health Sciences International, Princeton, NJ, USA

OBJECTIVES: To assess the impact of compliance with biologic therapies on clinical measures, including symptoms, quality of life (QOL), and medical resource use in rheumatoid arthritis (RA) patients. METHODS: Patient-reported data were collected from the 2008 Rheumatoid Arthritis Patient Study, an Internet survey of RA patients. The sample included RA patients with a self-reported diagnosis (n = 2,048 respondents, 47% (23.2%) used biologic therapies, 74.3% were female, and the average age was 51.9 years. The average duration of RA was 11.9 years, with 20.0% reporting severe disease. Among patients who used biologics, 413 (21.2%) patients discontinued and 80 (16.8%) patients reported skipping doses in the last 12 months. Compared to the groups who discontinued, or skipped biologic doses, the current users who did not skip had the best symptom and QOL scores: morning stiffness (6.5, 5.9, 5.7), fatigue (7.0, 6.9, 6.23), pain (6.5, 6.1, 6.71), MCS (36.0, 41.7, 41.9), and PCS (30.4, 29.2, 32.8) (all P < 0.05). There were no statistical differences in medical resource use except physician visits, which were significantly lower in current users who did not skip doses. CONCLUSIONS: Patients who were compliant with their biologic therapy had better outcomes compared with patients who discontinued or skipped doses. Compliance with biologic therapy is an important factor optimizing effective treatment of RA.