(P < 0.05). In addition, patients’ race and gender do not affect the medication adherence (P > 0.10) and, patients’ years of education, BMI and age are positively associated with adherence (P < 0.05).

CONCLUSIONS: In recent years, one out of three people in the U.S. had at least one gap in insurance coverage due to job change or temporary unemployment. Studies focusing on the current insurance status may underestimate the impact of health insurance gaps and the population at risk.

The policy debates on health insurance should not only focus on the uninsured but also those affected by intermittent non-coverage. Further research is needed on how insurance instability may affect treatment of other chronic conditions other than hypertension.

CM2
UTILIZATION AND PERSISTENCE OF ALISKIREN IN A REAL-WORLD ENVIRONMENT
Zeng P1, Lau H2, Hanson K1, Patel BV1, Gao S3
MedPharm Healthcare Systems, Inc, San Diego, CA, USA; 1Novartis Pharmaceuticals Corporation, East Hanover, NJ, USA
OBJECTIVES: Aliskiren is the first marketed direct renin inhibitor approved for the treatment of hypertension in 2007. Study objectives were to evaluate the utilization and persistence of aliskiren in a real-world setting. METHODS: A retrospective cohort analysis was conducted using data from a large US pharmacy benefit manager who administers benefits to 27 million members nationally. Patients 18 years or older with at least two claims for aliskiren within a 12 month period of initiating treatment between April 2007 and October 2007 were included in the analysis. Patients also had to be continuously enrolled in the same health plan 12 months prior to and 13 months after initiating aliskiren. Persistence on aliskiren, defined as time to discontinuation (i.e., >30 day medication gap), was evaluated using a multivariate Cox proportional hazards model. Covariates adjusted in the model included age, sex, comorbidities, geographic region, insurance type, copay, pre-scriber specialty and prior antihypertensive utilization. RESULTS: A total of 1329 patients were identified as having received aliskiren. Mean patient age was 63.5 (s.d. = 13) years and 52.3% were female. Most patients receiving aliskiren were not naïve to antihypertensive treatment. In the 12 months prior to initiating aliskiren, 90.1% of patients had received at least one other antihypertensive medication, and 57.3% had used 3 or more classes of antihypertensives. Mean persistence on aliskiren was 248 days (s.d. = 132) days. Multivariate analysis of persistence on aliskiren suggest that the risk of discontinuing was higher among those with relative to copays between $0 and $5 (Hazard ratios:1.74, 95% CI:1.34-2.34).

CONCLUSIONS: Aliskiren is most used among patients previously treated with other antihypertensives and a lower pharmacy copay was an important factor associated with medication persistence. Additional research is needed to assess clinical implications of persistence.

CM3
THE IMPACT OF MEDICARE PART D ON ELDERLY PATIENTS’ COMPLIANCE WITH STATINS
Zhang D, Henderson SC, Denarie MF
Pfizer, Blue Bell, PA, USA
OBJECTIVES: To investigate the impact of Medicare Part D on elderly patients’ compliance with statins. METHODS: This is a quasi-experimental study with a pre-test and post-test for a treatment and comparison group. This study used IMS Health’s Lifelink longitudinal patient level data. The subjects were elderly patients who were continuously eligible for statins in both January 2005 and January 2006. The subjects who enrolled in Medicare Part D in 2006 served as the treatment group and those who did not enroll served as the comparison group. Compliance was measured by proportion of days covered (PDC) over 11 months in both 2005 (pre-test) and 2006 (post-test). All the subjects’ baseline characteristics including age, gender, payment type, and patient type (statin naive vs. continuing) were compared by t-test or chi-square test. The difference-in-difference model was used to test whether Medicare Part D has an impact on patients’ compliance. RESULTS: A total of 473,475 elderly patients filled statin prescriptions in both January 2005 and January 2006. The mean age was 71.6 years with 55.85% female. A majority of the subjects was continuing statin users in 2005 (97.52%) and had pharmacy insurance (97.98%). A total of 201,378 (42.53%) patients enrolled in Medicare Part D in 2006. Female patients (Chi-square = 6101.43, P < 0.0001) and patients who paid their prescriptions by cash in 2005 (Chi-square = 2648.82, P < 0.0001) were more likely to enroll Medicare Part D in 2006. The average PDC was 80.33% and 74.40% for Medicare Part D patients and 80.04% and 71.80% for non-Medicare Part D patients in 2005 and 2006, respectively. After controlling baseline characteristics, Medicare Part D patients had 2.31% more PDC than non-Medicare Part D patients (b = 2.31, t = 23.69, P < 0.0001). CONCLUSIONS: Medicare Part D has a significant and positive impact on elderly patients’ medication compliance. It is important to encourage elderly patients to enroll Medicare Part D.

CM4
NONADHERENCE TO CLINICAL PRACTICE GUIDELINES FOR MULTIPLE DISEASE CONDITIONS IN A CALIFORNIA MEDICARE POPULATION
Nabati R1, Knight TK2, Prasad JS1, Xu J3, Carroll C4
1University of Southern California, Los Angeles, CA, USA; 2GlaxoSmithKline, Research Triangle Park, NC, USA
OBJECTIVES: To assess quality of care in selected California Medicare (Medi-Cal) diseases through evaluation of adherence to clinical practice guidelines (CPG) and medications. METHODS: Eligibility and claims data (2002-2004) were used to identify patients with hyperlipidemia (HypHLP), hypertension (HYPH), coronary artery disease (CAD), congestive heart failure (CHF), diabetes (DiAB), or depression (DEP). Adherence was assessed using 2004 data. CPG adherence was based on appropriate antihypertensive and adherence to recommended laboratory tests (HbAlC, LDL-C) and eye examinations for diabetes patients. Nonadherence to medications was based on medication possession ratio < 0.8. Chi-square tests were conducted to evaluate the association of CPG and medication nonadherence with demographic variables. RESULTS: The proportion of patients not using appropriate medications varied by disease (62% DEP, 43% HYPH, 40% HYPH, 31% CAD, 25% for both DiAB and CHF). Approximately 74% of CHF patients were not using any beta blocker (BB), Younger age (<65 years < 0.01), Blacks (vs. Whites < 0.0001), and Medicaid-only patients studying Medicare/Medicare dual eligible < 0.0001 for significance for BB were more likely to lack appropriate medications, with the exception of depression, where older patients and whites were more likely without appropriate medications (all P < 0.0001). For diabetes patients, 90% lacked HbAlC test, 84% lacked LDL-C test, and 57% were without an eye exam. Older and dually eligible patients were less adherent with these measures (all P < 0.0001). Nonadherence with medications was high (84% DEP, 72% CHF, 69% HYPH, 51% CAD, 48% HYPH, 41% DiAB), with younger age (P < 0.05), Blacks (P < 0.0001), and Medicaid-only patients (P < 0.0001, non significant for BB) more likely nonadherent than comparison subgroups. CONCLUSIONS: Medi-Cal adherence to CPG and medications varied by condition, but was suboptimal across all diseases. A greater proportion of patients were nonadherent to medication than were not using appropriate medications. Future investigation focused on potential factors influencing medication nonadherence, e.g., poor disease knowledge, subsequent beliefs is recommended. Disease management programs designed for specific diseases, and addressing patient-related characteristics (age, race) along with alterable factors (eligibility), may be most effective for improving adherence.

DB1
PROJECTED COST-EFFECTIVENESS OF BIPHASIC INSULIN ASPART IN PATIENTS WITH TYPE 2 DIABETES PATIENTS SWITCHED FROM BIPHASIC HUMAN INSULIN IN THE UNITED STATES
Asparg M1, Thomsen TL2, Knudsen VK3
1Novo Nordisk Inc, Princeton, NJ, USA; 2Novo Nordisk A/S, Virum, Denmark; 3Novo Nordisk A/S, Bagsvaerd, Denmark
OBJECTIVES: Type 2 diabetes is a chronic illness that affects more than 17 million Americans, leading to early death as well as to reduced quality of life due to complications such as blindness, renal failure etc. This study was undertaken with the aim of estimating cost-effectiveness of the premix analog insulin, biphasic insulin aspart 30 (BIAsp), when switched from biphasic human insulin (BIH). METHODS: The well validated CORE Diabetes Model was used to project the clinical outcomes based on short-term data (26 weeks) from a Canadian subset of the IMPROVe™ observational study. The cohort (n = 310) had a mean age of 64.2 ± 10.96 years and 61.7% were male. In the IMPROVe™ study, patients were switched from BIH to BIAsp and the main results included a reduction of HbAlc from 8.42 ± 1.61% to 7.84 ± 1.46%, an increase in BMI of 0.28 ± 1.23 kg/m2 and a reduction in major complications e.g., acute hypoglycemic events 83.5% and 33%, respectively. The direct medical costs (complications + treatment costs) were projected, using US unit costs, over patient lifetimes, and future costs and clinical discounts at 3% per annum. RESULTS: The short-term benefits of switching from BIH to BIAsp are projected to be partly offset by reduced later diabetes-related complications. The net lifetime cost increase is greatly justified by improved outcomes. The incremental cost-effectiveness ratio is well within what is normally considered good value for money in the United States.

DB2
ANTI-HYPERTENSIVE DRUG USE AND RISK OF DEMENTIA IN PATIENTS WITH DIABETES MELLITUS (DM)
Jamrozik K1, Parrish M2, Kahan M2, Swanepoel R1, Aparasu R1, Yadav R1, Morgan R1
1University of Houston, Houston, TX, USA; 2Analysis Group Inc, Boston, MA, USA; 3Center of Quality of Care and Utilization Studies, Veterans Affairs Medical Center, Houston, TX, USA, 4Baylor Neurology, Houston, TX, USA; 5University of Texas, Houston, TX, USA
OBJECTIVES: Anti-hypertensive (AHT) drugs are commonly prescribed to patients with risk factors for dementia such as DM patients, who are at increased risk of dementia. METHODS: For the purpose of this retrospective study, we identified a national cohort of US veterans (age ≥ 65 years) with incident dementia between October 1996 and December 2000 in the VA records or between January, 1999 and December, 2000 in the VA-Medicare merged data. The presence of hypertension (HT) was also assessed within the same period. The period prevalence for each