coverage gap period, a considerable proportion of beneficiaries stopped taking medications in both the groups and the proportion of beneficiaries considered adherent (MPR>0.80) also dropped for both the groups. **CONCLUSIONS:** Medicare Part D beneficiaries face significant barriers to adherence, especially those reaching the coverage gap. Interventions to improve adherence should target all beneficiaries, particularly those using multiple medications.

PIH35
UTILIZATION AND ADHERENCE ONE-YEAR POST CDHP IMPLEMENTATION
Averbukh AN, Matlin OS, Levine L
CVS Caremark, Northbrook, IL, USA
OBJECTIVES: To establish any impact of the high deductible Consumer Directed Health Plans (CDHP) on the overall utilization and adherence outcomes for some key therapeutic classes one year post implementation. **METHODS:** CVS Caremark pharmacy claims data (7/1/2008 – 7/1/2011) was analyzed. This study was designed as a retrospective pre-post cohort study. For the clients who implemented CDHP in 2010, we compared overall utilization and adherence (pre- and post- implementation date) between patients who opted into CDHP vs. those who stayed in Traditional (non-CDHP) plans for specific therapies: angiotensin-converting enzyme inhibitors (ACEIs) or angiotensin-II receptor blockers (ARBs), HMG-CoA reductase inhibitors (statins), and Biguanides (e.g. metformin), identified based on the GPI-4 and GPI-6 codes (Biguanides: 2725/279970/279980- ARBs: 3615/369930/369940-ACEIs: 3610/369930/369940- STATINS: 3940- PPIs: 4927). Bi-variate and multi-variate analyses, including mixed effects, were conducted using SAS Version 9.1 (9.2) with SAS/STAT. **RESULTS:** The total of 132,846 patients met inclusion criteria. Generic Dispense Rate (GDR) increased by 5.9% (p<0.001) in the CDHP cohort compared to the 4.7% (p<0.001) increase in the Traditional cohort between the pre and post periods. No significant differences were observed in the 90-day supply distribution between the two cohorts. Observed (unadjusted) 12-months adherence did not change significantly post CDHP implementation in the 4 key therapeutic classes: STATINS, ACEIs, ARBs, and BIGUANIDES. The utilization of PPIs decreased post-implementation by 0.34% (p<0.05) in the CDHP cohort, while it increased by 2.5% (p<0.001) in the Traditional cohort. **CONCLUSIONS:** CDHP members were observed to behave in a cost-effective manner. Post-implementation increase in GDR in the CDHP cohort was 1.2% (p<0.001) higher compared with the members in the Traditional cohort. The CDHP cohort demonstrated decreased utilization of some non-essential medications, but their observed adherence to key therapies was unaffected.

PIH36
A DISCRETE CHOICE EXPERIMENT IN DIFFERENT HEALTH STATES: PATIENT PREFERENCES FOR PATIENT-CENTERED HEALTH CARE DELIVERY SYSTEMS
Mühlbacher AC[1], Bethge S[1], Schulman K[2]
[1]*Hochschule Neubrandenburg, Neubrandenburg, Germany,* [2]*Duke Clinical Research Institute, Durham, NC, USA*
OBJECTIVES: Patient-centered care is seen as a critical factor in a high-performance health care system. We considered a randomized decision-situation in which the available information is given by three hypothetical health states (information sets: consider you have been diagnosed with diabetes, lung cancer, or based on the status quo of the respondent). **METHODS:** Within a discrete-choice experiment (DCE) 21 characteristics of a healthcare delivery system are being used to construct 4 DCEs based on thematic mapping (patient-involvement; point of care; personnel; organization). Each DCE included six attributes with three specific levels. Furthermore respondents were randomly assigned and asked to make their decisions based on different information sets. **RESULTS:** For the N=3900 respondents the feature "out-of-pocket costs" was the important attribute across all 4 DCEs (DCE-1 coefficient, 0,6550; DCE-2 coefficient, 0,8624; DCE-3 coefficient, 0,6991; DCE-4 coefficient, 0,7926). Only "multidisciplinary care" in DCE-3 (Personnel) scored higher than cost with a coefficient of 0,7081. In DCE1 regarding patient-involvement, "trust and respect" (0,6187) and in DCE 2 addressing preferences at the point of care, "shared-decision making" (0,7125) were of greatest importance. In DCE 4 the attribute "treatment guidelines" (0,4682) was of high importance. The analysis showed that the relevance of the "out-of-pocket cost" changed when respondents were asked to consider their responses in the context of diabetes or lung cancer diagnosis (status quo: 0.6749; diabetes: 0.81145; lung cancer: 0.50431). Furthermore, the feature "trust and respect" (status quo: 0.70338; diabetes: 0.65555; lung cancer: 0.6369) was also less valuable when participants assumed a worse health state. **CONCLUSIONS:** The study aimed to close the gap between simplistic representations of patient preferences in today's health care systems and the complexity of actual patient decision-making processes by using the explanatory power of DCEs. Understanding how patients and stakeholders perceive and value different aspects of coordinated care is vital to the optimal design and evaluation of programs.

PIH37
TEMPORAL-OUTCOME FRAMING PREFERENCES FOR PRESCRIPTION MEDICATION INFORMATION AMONG ADULTS WITH CHRONIC DISEASE IN THE UNITED STATES
Mchorney C[1], Zhang NJ[1], Villigran M[2]
[1]*Merck & Co, Inc., North Wales, PA, USA,* [2]*George Mason University, Fairfax, VA, USA*
OBJECTIVES: This study aims to: identify patient preferences for prescription-medication information in terms of temporal framing (short- vs. long-term outcomes) and examine factors associated with such information preferences. **METHODS:** A total of 12,689 surveys were obtained from the Harris Interactive Chronic Illness Panel, a nationally-representative, Internet-based panel of adults with chronic disease. Respondents were asked to rank order their preferences for prescription-

medication information in terms of information that underscored short- versus long-term health outcomes. Logistic regression was used to examine factors associated with first-declared preference for temporal framing. Independent variables were demographics and multi-item scales assessing medication beliefs (perceived necessity, perceived concerns, perceived affordability, patient knowledge) and present orientation as measured by the Concern for Future Consequences scale. **RESULTS:** Average age was 60 (range of 40-92), 52% were female, and 92% were Caucasian. A full 84% of respondents preferred prescription-medication information about long-term health outcomes. Preferences for long-term outcome information were significantly associated (p < 0.01) in multivariate models with older age, higher income, having drug-insurance benefits, higher perceived affordability, higher perceived necessity, and lower present-time orientation. For example, persons with high perceived medication affordability were 1.9 times more likely to prefer information about long-term health outcomes compared to those with low perceived affordability. Persons with high perceived need for medications were 1.6 times more likely to prefer information about long-term health outcomes compared to those with low perceived need. Persons with low present orientation twice as likely to prefer information about long-term health outcomes compared to those high in present orientation. **CONCLUSIONS:** Information about the long-term effects of prescription medications was the most preferred information expressed by 12,689 adults with chronic disease and was influenced significantly by medication beliefs and present orientation. Providers, manufactures, and payers should acknowledge these temporal preferences when developing patient-education materials about prescription medications.

PIH38
THE RELATIVE INFLUENCE OF PERCEIVED NEED FOR MEDICATIONS VERSUS PERCEIVED MEDICATION CONCERNS IN DETERMINING MEDICATION ADHERENCE: NARRATIVE SYSTEMATIC REVIEW AND META-ANALYSIS
Zhang NJ, McHorney C
Merck & Co, Inc., North Wales, PA, USA
OBJECTIVES: The Beliefs about Medication Questionnaire (BMQ) is a measure of patients' medication beliefs (perceived need for medications and perceived medication concerns), and it has been used widely in investigations of medication adherence. To date, there has been little assessment of the relative importance of necessity vs. concerns in determining medication adherence. Using a systematic literature review and subsequent meta-analysis, this study evaluates the impact of BMQ necessity, concerns, and necessity-concerns differential as a predictor of medication adherence. **METHODS:** Articles were identified through searches conducted on MEDLINE, CINAHL, Psych Info, EMBASE, International Pharmaceutical Abstracts, PubMed, and review of reference citations. Methodological variables, effect sizes of associations, diseases, and measures of adherence were abstracted from each eligible article. Studies were categorized by BMQ measures (necessity, concerns, and the differential), statistical significance (bivariate or multivariate significance, insignificance, or not applied), disease category, and adherence-outcome metric. The relative impact of BMQ measures on adherence across different categories was assessed. **RESULTS:** Across 77 studies, significant multivariate associations were reported between adherence and perceived concerns (57.4%), perceived necessity (75.6%), and the differential (88.9%). Two-thirds of the 33 multivariate analyses demonstrated higher effect sizes (odds ratios or standardized regression coefficients) between necessity and adherence than between concern and adherence. There was wide variation between BMQ measures and adherence across diseases and adherence metrics. For example, necessity was significantly associated with adherence in 100% of diabetes studies but 0% of renal studies. Self-reported adherence metrics and pill counts had the lowest and highest rates, respectively, of statistical significance with BMQ. **CONCLUSIONS:** Perceived need for medications is a more potent predictor of adherence than medication concerns. Perceived need for medication is a mutable patient belief. Adherence interventions may improve their effectiveness if perceived need for medications became a central theoretical and interventional focus.

PIH39
ELICITING PREFERENCES TO THE EQ-5D-5L HEALTH STATES: DISCRETE CHOICE EXPERIMENT OR MULTIPROFILE CASE OF BEST-WORST SCALING
Xie F[1], Pullenayegum E[1], Gaebel K[1], Oppe M[2], Krabbe PFM[3]
[1]*McMaster University, Hamilton, ON, Canada,* [2]*iMTA, Rotterdam, The Netherlands,* [3]*University of Groningen, Groningen, The Netherlands*
OBJECTIVES: To compare the feasibility and reliability of the binary discrete choice experiment (DCE) and the multiprofile case of best-worst scaling (BWS) techniques in eliciting preferences for the EQ-5D-5L. **METHODS:** Forty-eight EQ-5D-5L health states (HS) were selected using a Bayesian efficient design and grouped into 24 pairs for DCE tasks and eight sets for BWS tasks (each set has three HS). Participants completed 12 pairs and eight sets in random order. Time to complete each task was recorded. Participants were asked to rank each HS using a visual analogue scale (VAS). Each participant completed, for a second time, 3 DCE pairs and 2 sets of the BWS tasks randomly selected from the original pairs and sets, respectively. Participants answered questions about the difficulty in imagining EQ-5D-5L HS and in completing the tasks. A conditional probit model was used to estimate latent utilities for the EQ-5D-5L HS which were subsequently rescaled to facilitate the comparison. **RESULTS:** One hundred persons participated (mean age: 45 years, 66% female, 75% well-educated). Mean time to complete 12 DCE tasks was 7.7 minutes and 10.1 minutes for eight BWS tasks. Some level of difficulty imagining the EQ-5D-5L HS was reported by 70% of participants. Only 13% of the participants reported no difficulty when choosing between two HS or from three HS. The intraclass correlation coefficient (ICC) was 0.53 for DCE tasks and 0.45 for BWS tasks. The