followed by a maintenance every 8 week + metotrexate 15 mg/week. This analysis was conducted for a retrospective analysis of administrative claims data in the model-sourced drug acquisition and administration costs. RESULTS: Inclusion of tocilizumab does not imply additional costs to the Colombian health system and may even save resources by 17 million dollars until 2017. In the probabilistic sensitivity analysis, tocilizumab was a thrifty intervention through 2004 through 2017. This is due to the fact that the inclusion of tocilizumab saves costs for the Colombian health system (with increases of the inclusion, more saves) versus capitation payment unit (UCP). CONCLUSIONS: The inclusion of tocilizumab to mandatory health plan Colombia, would have an impact thrifty indicating that the health budget would not increase with inclusion.

PMS17 COST OF TUMOR NECROSIS FACTOR INHIBITORS AND TREATMENT PATTERNS AMONG MEDICAID BENEFICIARIES WITH RHEUMATOID ARTHRITIS
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OBJECTIVES: To estimate annual cost-per-treated patient and treatment patterns for patients initiating first or second-line subcutaneous abatacept, adalimumab, or etanercept from 2007-2011. The index date was the first index agent claim predicted by 180 days and followed by 360 days of continuous enrollment. Patients with conditions other than RA were excluded. “Continuing” patients had ≥ 1 claim in the 180 days pre-index for their index biologic; “new” patients did not. Cost per treated patient was calculated by the 360 days post-index agent as the total index drug and administration costs to the payer and the costs of switched-to agents divided by the number of patients who received the index agent. Costs were based on the predicted claim (multiples the September 2013 wholesale Acquisition Cost. Treatment patterns were also described. RESULTS: A total of 1,085 patients met the study criteria: 48% received etanercept (n = 521), 37% received adalimumab (n = 405), and 15% received infliximab. Treatment patterns were similar across treatment groups (mean age 47.4 years, 83% female). The annual cost per treated patient was lowest for etanercept ($18,466), followed by adalimumab ($20,983) and infliximab ($26,516). For all agents, annual costs were lower for new (Cost Ratio (CR) = 0.80, p < 0.001) than for continuing patients (CR = 0.19, p < 0.001). Cost per treated patient was $17,996 for etanercept, $18,992 for adalimumab, and $24,756 for infliximab. Rates of index drug discontinuation (including switching) were 43%, 66%, and 50% for etanercept, adalimumab, and infliximab, with switching rates of $17.5%, 20.2%, and 31.0%, respectively. CONCLUSIONS: Etanercept had a lower cost per treated patient compared with adalimumab or infliximab in both new and continuing patients among Medicaid enrollees with RA.

PMS18 COMPARISON OF HEALTH CARE COSTS BETWEEN RHEUMATOID ARTHRITIS PATIENTS INITIATING FIRST OR SECOND-LINE SUBCUTANEOUS ABATACEPT, ADALIMUBUM, OR ETANECPT: A DIFFERENCE-IN-DIFFERENCE ANALYSIS
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OBJECTIVES: There are no published data on health care costs among rheumatoid arthritis (RA) patients initiating intravenous (IV) abatacept, adalimumab, etanercept or infliximab. METHODS: A retrospective analysis of administrative claims data from US managed care plans. Patients who initiated one of the following study biologic disease modifying antirheumatic drugs: IV abatacept, adalimumab, etanercept or infliximab were identified and date of initiation was defined as the index date. The identification period was September 2004 through December 2007. The sensitivity in the 6 months pre-index (baseline) period and in the 12 months post-index (follow-up) period, were aged ≥ 18 years at index, and had ≥ 1 baseline medical claim with an ICD-9 CM diagnosis code for RA (714.0x, 714.2x). Outcomes evaluated in the 12 month follow-up period were total health care costs (medical + pharmacy) and switch rates. Generalized Estimating Equations were used to compare mean change from baseline in total health care costs between the treatment groups. Logistic regression analysis was used to compare the odds of switching between treatment groups after controlling for baseline characteristics. RESULTS: The study included 8505 first-line patients and 2181 second-line patients. 15% of the total baseline health care costs were higher for etanercept (Cost Ratio (CR) = 1.26, p = 0.0112), adalimumab (CR = 1.30; p = 0.0065) and infliximab (CR = 1.10; p = 0.3355) compared to abatacept. In the first-line population, after controlling for baseline covariates, etanercept (Odds Ratio (OR) = 2.33, 95% CI:1.44, 3.77) and infliximab (OR = 1.91, 95% CI:1.7, 3.13) significantly had higher odds of switching compared to abatacept. For the second-line population results were consistent with results from the first line population. CONCLUSIONS: First- or second-line abatacept patients had lowest mean change from baseline in total health care costs and lower rates of switching compared to adalimumab, etanercept or infliximab patients.

PMS20 ONE-YEAR DISEASE-RELATED HEALTH CARE COSTS OF INCIDENT OSTEOARTHRITIC FRACTURES IN GERMANY
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OBJECTIVES: There are no published data on health care costs among osteoarthritis patients. There are several studies on disease-related costs of osteoarthritis. However, costs are not available for Germany. Therefore, the aim of the present study was to estimate the direct disease-related costs of OVF in patients with newly diagnosed fracture in the first year after index in Germany. METHODS: Data was obtained from a claims dataset of a large German health insurance fund. Subjects ≥ 60 years with a new vertebral fracture between 2006 - 2010 were studied retrospectively compared to a matched paired OVF-free patient group. All-cause and fracture-specific medical costs were calculated in the 1-2 years before and follow-up period. Generalized linear model (GLM) was estimated for total follow-up health care costs. RESULTS: A total of 2,277 pairs of matched OVF and OVF-free patients were included in the analysis. Baseline all-cause health care cost difference in the 4 quarters following the index date between OVF and OVF-free patients was 8,200 (p < 0.001). Of the difference, almost two-thirds was attributable to inpatient services and one-quarter to prescription drug costs. The GLM showed revealed that costs per index date increased by an additional 6,490 (p < 0.001; CI: 5,890 ± 6,731 t). CONCLUSIONS: Despite limitations of this study, including sensitivity and specificity of claims-based diagnoses, and generalizability issues, our results are consistent with other research and demonstrate that OVF’s are associated with significant costs. In light of the high and increasing incidence and prevalence of these fractures, the results emphasize the importance of research in this field.

PMS21 NON-INVASIVE EXOGEN ULTRASONIC TREATMENT OF NON-HEALING FRACTURES LEADS TO DECREASED COSTS COMPARED TO SURGERY
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OBJECTIVES: The cost associated with fracture care exceeds $21 billion. Yet, not all fractures heal, leading to even further expenses. There is an economic and societal burden to surgical treatment. The purpose of this study is to compare the costs associated with surgical treatment versus non-invasive methods in managing non-unions (fractures that have not healed). METHODS: A retrospective cohort direct match study was performed using administrative claims (integrated medical and pharmacy data) from the IMS LifeLink® Health Plan Claims Database. All patients with at least one claim for EXOGEN® Ultrasound Bone Healing System (non-invasive) or non-surgery union were identified between April 1, 2007 and March 31, 2010, data through March 31, 2011 were used. RESULTS: 1,158 matched patients were selected (579 in ‘Exogen Only’ and 579 in ‘Surgery Only’ cohorts). Over the 12 month post-index period, the Surgery Only cohort had higher mean total all-cause direct medical costs compared to the Exogen Only cohort ($25,850 vs. $18,813; p < 0.001). Mean out-of-pocket costs were also significantly higher among the Surgery Only cohort compared to the Exogen Only cohort ($9,612 vs. $5,928; p < 0.001). Non-invasive fracture-related mean direct medical costs were over 126% higher in the Surgery Only group versus the Exogen Only group ($1,276 vs. $4,987; p < 0.001). CONCLUSIONS: Compared to a standard treatment plan, the use of EXOGEN® for the treatment of non-union fractures resulted in significant cost savings which could amount to $4 billion dollars annually in the US alone. Additional research is needed to further quantify true costs (both direct and indirect) as well as the cost-effectiveness of two treatment modalities while monitoring outcomes.