cally more likely to: be female, be less physically active, be overweight or obese, reside in an urban community, have more comorbidities, have a lower HRQoL and a lower household income. The 1-year physician, day procedure and hospitalization costs were statistically higher in the OA group. **CONCLUSIONS:** These results indicate that the humanistic and economic burden of OA in Ontario is considerable.

PMS61

ALTERNATIVE APPROACHES FOR ESTIMATING DRUG DOSING IN THE TREATMENT OF RHEUMATOID ARTHRITIS: THE CASE OF INFLIXIMAB

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OBJECTIVES: This study examined two approaches to estimate drug dosing of infliximab, a commonly used biologic with weight-based dosing, for patients with rheumatoid arthritis (RA). **METHODS:** A national commercial database was utilized to analyze patients having a medical claim of infliximab therapy initiated between January 2004 and December 2007. Inclusion criteria were patient age ≥18, ≥2 RA diagnosis codes during treatment with infliximab, and 365 days of persistence with infliximab. Patients were excluded if they had other selected inflammatory diseases, had medical/ pharmacy claims of anti-TNFs during 6 months prior to the infliximab index date, or a record of taking abatacept or rituximab while on infliximab. Two methods were compared for estimating dosing of infliximab. Method I, which has been previously published, estimated dosing by dividing the plan's allowed cost of infliximab by the wholesale acquisition cost (WAC), adjusting for WAC at time of each claim. Method II, a novel approach, used a propensity matching approach to impute patient's weight onto the commercial database. Since infliximab has weight-based dosing, combining the cost of drug with patient weight allowed for an estimate of dosing. Dosing was expressed as the number of 100 mg vials of infliximab. Calculated drug dosing using the two methods were compared in terms of means, medians, and correlation coefficients. **RESULTS:** There were 20,172 drug dosing events in our sample. Median dose was slightly higher under Method I (3.76 vials) than under Method II (3.39 vials). Mean overall dosing levels were very consistent: 4.01 vials under Method I and 4.11 vials under Method II. Correlations among the two measures were high (rho = 0.75). **CONCLUSIONS:** Consistent calculations of infliximab drug dosing were obtained using two estimation approaches. Since several commercial databases lack direct information on weight-based drug dosing, such estimation methods may be useful.

PMS62

DIFFERENCES IN DEMOGRAPHICS AND PRE–INDEX HEALTH CARE UTILIZATION AND COSTS IN PATIENTS WITH RHEUMATOID ARTHRITIS TAKING ANTI-TNF BIOLOGICS DURING THE FIRST YEAR OF PERSISTENT THERAPY

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OBJECTIVES: To evaluate differences in demographics and comorbid conditions in patients with rheumatoid arthritis (RA) taking adalimumab, etanercept, or infliximab and to compare their health care utilization/costs six months prior to the start of their first year of persistent tumor necrosis factor inhibitor (anti-TNF) therapy. **METHODS:** A national commercial benchmark database was utilized to identify patients having a medical or pharmacy claim of an index biologic therapy started between January 2004 and December 2007. Inclusion criteria were patient age ≥18, ≥2 RA diagnosis codes (ICD-9 code 714.xx), and 365 days of treatment with the index anti-TNF agent. Patients were excluded if they had a diagnosis of select inflammatory conditions, had medical/pharmacy claims of anti-TNFs during 6 months prior to anti-TNF index date, or evidence of taking abatacept or rituximab while on anti-TNF. Continuous variables were summarized with means and standard deviations. Differences in means were tested with analysis of variance (ANOVA). Discrete variables were summarized by counts and percentages with chi square used to test for differences. **RESULTS:** A total of 4886 patients met inclusion criteria: adalimumab = 1279 (26%), etanercept = 2277 (47%), and infliximab = 1330 (27%). In all cohorts, the majority of patients were female (75%). There was a significant difference in mean age (years, ± SD) across the three cohorts: adalimumab (55, ± 12), etanercept (54, ± 12), and infliximab (62, ± 13) (p = .0001). Infliximab patients had significantly higher rates of diabetes, anemia, GERD, osteoarthritis, osteoporosis, and cardiovascular diseases than adalimumab or etanercept. Six months prior to the start of therapy, infliximab patients had significantly higher rates of health care utilization (radiology and office visits) compared to adalimumab or etanercept. **CONCLUSIONS:** When examining baseline characteristics of RA patients taking adalimumab, etanercept, or infliximab, results showed that infliximab patients were older, had higher comorbidity burden, and higher utilization of select health care services. Baseline characteristics should be adjusted for in-comparative analyses of anti-TNF drug utilization.

PMS63

EVALUATION OF THE QUALITY AND CONTENT OF OSTEOPOROSIS PATIENT EDUCATION INFORMATION AVAILABLE ON THE INTERNET

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OBJECTIVES: Patient education is a vital component of effective disease management and health promotion. People worldwide rely on the internet to resolve issues or obtain information related to any health condition. The information available on the web though easily accessible, lacks regulatory control and is subject to manipulation. This calls for a need to authenticate the information available on the web. In this study, we evaluated the quality and content of websites providing information on osteoporosis patient education by employing the widely accepted criteria. **METHODS:** About 210 websites providing patient education were retrieved from the meta search engine, 45 of which provided patient information on osteoporosis and were thus considered for evaluation. These health related websites were evaluated by 10 health care professionals for their HON Code compliance, their adherence to core education concepts and the HSWG criteria. **RESULTS:** Most of the sites were found to be compliant with the basic criteria stated by the HSWG. Only 11 of the 45 sites evaluated were HON Code compliant. A certain degree of variability in the quality of information of osteoporosis patient education with respect to core educational concepts was observed. **CONCLUSIONS:** Inclusion of helpful audio-visual descriptions, effective in-site search options, live conversations with experts and easier feedback mechanisms can be of significant help and can further help to fulfill the HSWG criteria and thereby enhancing the quality of patient information related to osteoporosis on the web.

PMS64

PROJECTION OF SURGICAL LOADS OF HIP AND KNEE ARTHROPLASTY IN GERMANY

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OBJECTIVES: Recent trend in the number of primary total hip arthroplasty (THA) and total knee arthroplasty (TKA) in the US has suggested a massive future demand for THA and TKA. It is unknown if this trend is the same in Germany as they have slower growth rate in obesity compared to US. The purpose of our study was to describe the recent trend of primary THA and TKA in Germany. **METHODS:** Registry data on THA and TKA, collected between 2004 and 2008, were obtained from the German Bundesgeschäftsstelle für Qualitätssicherung (BQS). **RESULTS:** During the year 2008, approximately 156,887 primary THA and 146,052 TKA were performed. This was a 14% increase in THA and a 32% increase in TKA compared to the year 2004. The number of annual increase in surgery was 6,848 (R-square, 88%) for THA and 8,875 (R-squares, 99%) for TKA. During this time period, the proportion of non-cemented THA has increased gradually (60% in 2004 vs. 67% in 2008) and cemented THA decreased steadily (19% in 2004 vs. 13% in 2008). Hybrid THA has remained approximately the same (21% in 2004 vs. 20% in 2008). **CONCLUSIONS:** The growth of joint replacement procedures performed follows an exponential function in the U.S. However, our study showed that the growth pattern in Germany follows a linear function for both THA and TKA. In the US, the number of procedures increased excessively among people aged between 45–64 years old, but this phenomenon was not observed in Germany. Another noticeable phenomenon was the ratio between hip and knee replacements. The number of TKA was approximately double compared with THA in the US. However, the number of TKA was slightly smaller than THA in Germany. In conclusion, Germany expects a slower and gradual increase in surgical loads of THA and TKA.

PMS65

DERIVING DOCTORS' PRESCRIBING PATTERNS FROM CLAIMS DATA: AN APPLICATION TO TNF AND NON-TNF BIOLOGICS

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OBJECTIVES: Doctors' practice and prescribing patterns are based on many factors, some of which are not observable. We derived doctors' prescribing patterns from U.S. claims data to show how it might be related with tumor necrosis factor (TNF) prescription decisions. METHODS: Based on U.S. claims data, we assigned doctors' IDs based on the physician who treated the enrollee for the longest period of time after eliminating any emergency room, laboratory, and radiology services. Physician prescribing patterns were then calculated from J-codes from the outpatient service and prescription drug records for TNF and non-TNF biologics. RESULTS: Among all TNF/anti-TNF prescribing doctors, patients who initiated their first TNF therapy were prescribed etanercept 42.8% of the time, adalimumab 31.2%, infliximab 21.1%, abatacept 1.7%, anakinra 0.5%, and rituximab 0.8% of the time. If doctors' practice/prescribing patterns favored TNF use or SubQ, patients were more likely to be switched to another TNF rather than to non-TNF biologics. CONCLUSIONS: Doctor's prescribing patterns are important factors for prescription decisions. Any outcomes research models such as compliance, adherence or treatment effect studies should incorporate these patterns. Models who fail to control for these variables might contain omitted variable bias.