burden of disease. Registry data was used in 3 studies to validate/assess generalizability. All modeling studies combined registry with non-registry data (e.g. RCT). CONCLUSIONS: Registries provide a rich source of information on real-world patients which are being incorporated into health economic analyses. Although Nordic registry data is being utilized in HE studies, many analyses important to HE are not currently being performed (EBGM) and more specifically, lacks the ability to broaden the use and application of registry data in the field of rheumatic disease. Given the gap in data required for an economic evaluation (e.g. modeling), researchers continue to be aware of potential issues associated with the synthesis of RCT and registry data.

PMS04 PRELIMINARY RESULTS OF MULTIDISCIPLINARY SYSTEMATIC FOLLOW-UP OF FRAGILITY FRACTURES IN ORTHOPAEDIC CLINIC
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OBJECTIVES: Despite the major health care impact worldwide of fragility fracture, there are few systems in place to identify and capture targets to reduce future fracture risk and adverse outcomes. We implemented a multidisciplinary systematic follow-up of fragility fractures to close the care gap. METHODS: We recruited 543 subjects over 40 years of age who sustained a fragility fracture at the orthopaedic clinic of Hôpital du Sacré-Cœur de Montréal/Talon Hospital from July 2010 to 2013. Demographic and clinical data were assessed over 18-months of follow-up. We analyzed data of patients who have completed at least 18 months of follow-up (women 99; men 116). We described demographic data, BMD, perceived compliance to treatment, and subsequent fracture rates. We assessed the effect on bone markers and vitamin D levels using T-test. RESULTS: Mean age was at 61 years. The most common complication was the wrist (32%), followed by the ankle and proximal humerus (13%), vertebral (10%) and hip (7%). Close to 41.7% of women and 20% of men had already sustained a previous fragility fracture. At 18 months, 10.1% of women and 6.3% of men had already sustained a new fracture. High CTX-1 levels (≥ 2.8) were detected from 46.7% to 21.4% for women and 61.5% to 23.1% for men after 18 months of treatment (p < 0.001). Low Vitamin D levels (≤ 80 nmol/L) increased from 63% to 87.5% for women and 16.7% to 83.3% for men (p = 0.00001). Women and men perceived they were still persistent and adherent to treatment at 18 months in 90% and 88% of the time, respectively. CONCLUSIONS: Better diagnostic tools and systematic management of the fragility fractures and compliance monitoring can lower the fracture rates in the long term in this at-risk population.

PMS05 TRENDS IN DMARD TREATMENT FOLLOWING THE INTRODUCTION OF A RHEUMATOID ARTHRITIS MANAGEMENT QUALITY MEASURE
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OBJECTIVES: In 2005, a quality measure was added to the Healthcare Effectiveness Data and Information Set (HEDIS) that quantifies the proportion of rheumatoid arthritis (RA) patients who receive disease modifying anti-rheumatic drug (DMARD) therapy in a given year. This study describes annual trends in the HEDIS RA management measure in elderly Medicare and commercial insurance patients in U.S. RA patients from 2005 to 2012. METHODS: This was a retrospective observational study based on U.S. administrative claims data. Patients selected for study during a given measurement year were aged ≥ 18 years, had continuous insurance enrollment throughout the year, and had two outpatient claims, on different days, with a diagnosis of RA (ICD-9-CM codes 714.0, 714.1, 714.2, 714.81). Receipt of a biologic or non-biologic DMARD therapy was assessed annually from 2005 to 2012. Bivariate statistics were used to test for differences across the years. RESULTS: Annual sample sizes averaged ~95,000 RA patients. From 2005 to 2012, the RA quality measure was stable at approximately 83% of RA patients receiving DMARD treatment. Biologic DMARD utilization increased from 32% in 2005 to 39% in 2012 (p < 0.001), whereas use of non-biologic DMARDs decreased slightly from 74% to 72% (p < 0.001). Among the subset of patients aged ≥ 65 years with Medicare Supplemental insurance, the RA quality measure was slightly lower at approximately 78% receiving DMARD therapy. Fewer RA patients with Medicare Supplemental insurance received biologic DMARDs, however, utilization increased from 23% in 2005 to 29% in 2012 (p < 0.001). In the same time period, non-biologic DMARD use decreased from 63% to 60% (p < 0.001). CONCLUSIONS: Since the 2005 introduction of the HEDIS RA management quality measure, increases in the use of biologic DMARD therapy were offset by decreases in the use of non-biologic DMARD therapy. Findings suggest potential room for improvement in the quality of care for RA patients.

This study aims to detect and clarify signals of serious skin reactions associated with benzodiazepine anticonvulsants identified by generic names. Empirical Bayes (George & Liang inference interval (EB-GLI)) was used to calculate the EBGM for each benzodiazepine, including clonazepam, clorazepate, diazepam, and lorazepam.

PND2 NATURAL HISTORY OF PATIENTS WITH TUBEROUS SCLEROSIS COMPLEX RELATED RENAL ANGiomYOLiPOMA
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OBJECTIVES: To assess real-world effectiveness, based on registry data, of natalizumab treatment in Hungary was associated with serious skin reactions. In concordance with FDA's recommendations, patients should seek immediate help when dermal signs and symptoms are appeared and alternative anticonvulsant agent should be considered by prescribers. Signal evaluation activities are required to further characterize this risk.

PND3 REAL-LIFE EFFECTIVENESS OF NATALIZUMAB IN RELAPSING-REMITTING MULTIPLE SCLEROSIS (RRMS): A REGISTRY ANALYSIS
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OBJECTIVES: To assess real-world effectiveness, based on registry data, of natalizumab in multiple sclerosis (MS) patients with actively relapsing-remitting MS (RRMS). METHODS: Phase IV, observational, retrospective, multi-center database analysis on data from the period January 2009 – January 2013. Statistical analyses were performed using Kaplan-Meier and Cox PH regression. Inclusion criteria comprised adults aged ≥ 18 with high disease activity with rapidly evolving severe RRMS or a relapse despite treatment with beta-interferon or glatiramer acetate. The main outcome measure was change from annualized baseline relapse rate (ARR), with secondary endpoints comprising sustained disability progression and improvement at 12/24 months, and change in the mean Expanded Disability Status Scale (EDSS). Change from baseline ARR comprised ARR absolute values, relative reduction (percentage), and percentage of patients remaining relapse-free. Analyses were performed using frequency tables, graphics, and for binominal endpoints, subgroup analyses were conducted for age, gender and prior treatment received. RESULTS: A total of 216 individuals (72% of whom females) were included in the study. Mean baseline EDSS of the RRMS population was 4.35, 38 years at start of natalizumab therapy. A significant decrease in mean ARR was seen after 12 months compared to baseline (N=216, A=0.76, p-value<0.001), and between the first and second years of treatment (N=208, A=0.06, p-value<0.030). These results were robust, with a subgroup analysis of patients changed from baseline to 3.26 at baseline to 3.02 at 12 months and 3.16 at 24 months. No new safety concerns were noted. CONCLUSIONS: Natalizumab treatment in Hungary was associated with two-year effectiveness as shown by reduced ARR and stabilized EDSS over the observation period. These results are important for decision-makers striving to