Effectively target interventions to improve arthritis management in the Medicare managed care population.

**PM579**

**THE USE OF ADVANCED REPORTING INTEGRATING BIG DATA (COREREPORTS): THE CASE OF RHEUMATOID ARTHRITIS**

Martini N1, Maggioni A2, Rossi E1, Esposito J1, De Rosa M1

1Accademia Nazionale di Medicina, Roma, Italy, 2ANMCO Research Center, Florence, Italy

**OBJECTIVES:** To describe prevalence and to evaluate pattern of use and sanitary costs of patients treated with osteoporosis drugs, using advanced reporting tools and methodologies integrating Big Data (CoreReports).

**METHODS:** Starting from ANMCO Observatory, an Italian Database that collects health data on a population of 13.1 million Italian citizens, a new automated analytical tools (CoreReports) has been developed in order to manage, catalog and find the strategic indicators of healthcare professionals care pathways related to Diseases, Populations, Drugs, with benchmarking among different geographical areas. All web-based Reports are automatically generated on-the-fly according to analytical needs and validated by a Scientific Committee with experts in various diseases. Among different diseases national average pass rate on the Healthcare Inefficiency Data and Information System (HEDIS) measure "Osteoporosis Management in Women who had a Fracture" was 23\%.

This study has sought to identify characteristics associated with success or failure in meeting the current OP HEDIS measure. **METHODS:** Women were included if they were between 67-85 years (yrs) of age, had >1 fracture from July 2011 to December 2013 (index date = earliest encounter), and were continuously enrolled in a Humana Medicare Advantage with Prescription Drug coverage (MAPD) plan for at least 12 months. Index and 6 months post-index Patients were excluded if they had a BMD (bone mineral density) test or OP treatment pre-index. Descriptive statistics were compiled for the following variables: age, race, geographic region, and insurance type. Analysis included 12,664 patients (51\% women), of whom 5,264 (42\%) patients were classified as "success" (ie, "passed") and 7,400 (58\%) as "failure" ("failed") patients. Predictors for "success" and "failure" were analyzed.

CONCLUSIONS: Osteoporosis represents a condition of high epidemiological prevalence and with a strong impact on the social welfare, due to increased number of hospitalizations and diagnostic examinations. Therefore the implementation of a tool to evaluate patient care pathways with osteoporosis and estimate cost of illness and can be a valid instrument to support clinical governance.

**PM580**

**PATIENT CHARACTERISTICS ASSOCIATED WITH PASSING OR FAILING THE HEDIS MEASURE FOR POST-FRACTURE OSTEOPOROSIS MANAGEMENT**

Yuanayanan S1, Haxel-Fernandez L1, Boyson N1, Saundankar V1, Wang FE1, Name R1, Crawford AG1, McNana J1, Alatorre CI1

1Thomas Jefferson University, Philadelphia, PA, USA, 2Comprehensive Health Insights, Miramar, FL, 3Eli Lilly & Company, Indianapolis, IN, USA, 4Comprehensive Health Insights, Louisville, KY, USA.

**OBJECTIVES:** Despite an estimated 2 million osteoporosis (OP)-related fractures occurring annually, achievement of post-fracture OP quality measures is low. In 2013, the national average pass rate on the Healthcare Inefficiency Data and Information System (HEDIS) measure "Osteoporosis Management in Women who had a Fracture" was 23\%.

This study has sought to identify characteristics associated with success or failure in meeting the current OP HEDIS measure. **METHODS:** Women were included if they were between 67-85 years (yrs) of age, had >1 fracture from July 2011 to December 2013 (index date = earliest encounter), and were continuously enrolled in a Humana Medicare Advantage with Prescription Drug coverage (MAPD) plan for at least 12 months. Index and 6 months post-index Patients were excluded if they had a BMD (bone mineral density) test or OP treatment pre-index. Descriptive statistics were compiled for the following variables: age, race, geographic region, and insurance type. Analysis included 12,664 patients (51\% women), of whom 5,264 (42\%) patients were classified as "success" (ie, "passed") and 7,400 (58\%) as "failure" ("failed") patients. Predictors for "success" and "failure" were analyzed.

CONCLUSIONS: Osteoporosis represents a condition of high epidemiological prevalence and with a strong impact on the social welfare, due to increased number of hospitalizations and diagnostic examinations. Therefore the implementation of a tool to evaluate patient care pathways with osteoporosis and estimate cost of illness and can be a valid instrument to support clinical governance.

**PM583**

**PATTERNS OF DISEASE REMISSION AMONG PATIENTS WITH RHEUMATOID ARTHRITIS TREATED WITH BIOLOGIC THERAPIES IN JAPAN**

Narayanam S1, Lu Y2, Hutchings R2, Basket A3

1Ipsos Healthcare, Columbia, MD, USA, 2Ipsos Healthcare, London, UK

**OBJECTIVES:** To compare RA patients on disease remission in the EU and US among those receiving a biologic treatment as part of usual care. **METHODS:** A multi-country multi-center medical chart-review study of RA patients was conducted in 4Q2011 among physicians (majority: rheumatologists) in hospitals/private practices to collect de-identified data on patients who were recently treated with a biologic as part of usual care. Patients who were on 1st-line Treatment (20\% vs. 13\%; p < 0.0001) along with those in suburban (26.5\% failed vs. 19.6\% passed; p = 0.001), or rural (12.5\% failed vs. 7.8\% passed; p < 0.0001) areas. A greater proportion of women in the "passed" group (6.2\% failed vs. 4.8\% passed; p = 0.0001), while Hispanic women were more prevalent in the "passed" group (3.0\% passed vs. 1.3\% failed; p = 0.0001). A considerable percentage (21.8\%) didn’t received vitamin D supplements in association. Patients with osteoporosis received many drugs expression of commodity (cardiovascular drugs 67\% of patients, corticosteroids 25\%, nervous system drugs 33\%). More than 1/6 of patients were hospitalized during 2012 (Factors 2.2\%; Less than 50\% of patients controlled their serum calcium levels in the last three years, 34\% performed a bone densitometry. The average yearly cost/patient was 2.332\% 37\% due to drugs (30% specific drugs, 70% others), 45\% due to hospitalization and 18.8\% to lab tests and diagnostic examinations.

CONCLUSIONS: Osteoporosis represents a condition of high epidemiological prevalence and with a strong impact on the social welfare, due to increased number of hospitalizations and diagnostic examinations. Therefore the implementation of a tool to evaluate patient care pathways with osteoporosis and estimate cost of illness and can be a valid instrument to support clinical governance.

**PM584**

**COMPARISON OF CLINICAL CHARACTERISTICS OF PATIENTS WITH RHEUMATOID ARTHRITIS (RA) IDENTIFIED BY PHYSICIANS AS POTENTIALLY SUITABLE FOR BIOSIMILAR INFliximab VERSUS THOSE WHO WERE NOT CONSIDERED BIOSIMILAR INFliximab SUITABLE IN EUROPE (EU)**

Narayanam S1, Lu Y2, Hutchings R2, Basket A3

1Ipsos Healthcare, Columbia, MD, USA, 2Ipsos Healthcare, London, UK

**OBJECTIVES:** To compare RA patients on disease remission in the EU and US among those receiving a biologic treatment as part of usual care. **METHODS:** A multi-country multi-center medical chart-review study of RA patients was conducted in 4Q2011 among physicians (majority: rheumatologists) in hospitals/private practices to collect de-identified data on patients who were recently treated with a biologic as part of usual care. Patients who were on 1st-line Treatment (20\% vs. 13\%; p < 0.0001) along with those in suburban (26.5\% failed vs. 19.6\% passed; p = 0.001), or rural (12.5\% failed vs. 7.8\% passed; p < 0.0001) areas. A greater proportion of women in the "passed" group (6.2\% failed vs. 4.8\% passed; p = 0.0001), while Hispanic women were more prevalent in the "passed" group (3.0\% passed vs. 1.3\% failed; p = 0.0001). A considerable percentage (21.8\%) didn’t received vitamin D supplements in association. Patients with osteoporosis received many drugs expression of commodity (cardiovascular drugs 67\% of patients, corticosteroids 25\%, nervous system drugs 33\%). More than 1/6 of patients were hospitalized during 2012 (Factors 2.2\%; Less than 50\% of patients controlled their serum calcium levels in the last three years, 34\% performed a bone densitometry. The average yearly cost/patient was 2.332\% 37\% due to drugs (30% specific drugs, 70% others), 45\% due to hospitalization and 18.8\% to lab tests and diagnostic examinations.

CONCLUSIONS: Osteoporosis represents a condition of high epidemiological prevalence and with a strong impact on the social welfare, due to increased number of hospitalizations and diagnostic examinations. Therefore the implementation of a tool to evaluate patient care pathways with osteoporosis and estimate cost of illness and can be a valid instrument to support clinical governance.
OBJECTIVES: To assess clinical characteristics of RA patients considered biosimilar-infliximab-suitable and becomes available by their physicians, in comparison to those who were not considered infliximab-biosimilar-suitable in EU. METHODS: A medical chart-review study of RA patients was conducted among physicians (primarily rheumatologists) in hospitals/private practices in UK/France/Germany/ Italy and USA. Patients were identified during treatment evaluations/dynamics and patient symptomatology/ disease status; physicians identified whether patient was biosimilar-infliximab-suitable (yes/no), and if yes, rated how likely they would prescribe biosimilar-inflixi- mab to them when the product becomes available. Physicians were screened for practice-duration and patient- volume and recruited from a large panel to be geographically representative. Consequently patients currently on (or discontinued within past-3mo) biologic visiting each center/practice during the screening period were selected for chart abstraction; analysis compared biosimilar-infliximab-suitable to those who were not (per physician judgment), excluding those who previously failed infliximab. RESULTS: 731 patients (UK:166/France:110/Germany:66/Italy:190/Spain:199) were identified as biosimilar-infliximab-suitable; of these, 58% were rated ≥5 (scale:1-7; extremely likely) -1/10% regarding likelihood of being prescribed biosimilar-infliximab. Higher disease severity and a lower percentage of them used MTX (5.1%/4.4%), NSAIDs (16%/11%), and analgesics (25%/12%). Percentage were identified as biosimilar-infliximab-suitable in EU. RESULTS: 731 patients (UK:166/France:110/Germany:66/Italy:190/Spain:199) were included in the analysis. 260 (36%) UK/47% France/27% Germany/38% Italy/40% Spain:26% were identified as biosimilar-infliximab-suitable; of these, 58% were rated ≥5 (scale:1-7; extremely likely) -1/11% regarding likelihood of being prescribed biosimilar-infliximab. Higher disease severity and a lower percentage of them used MTX (5.1%/4.4%), NSAIDs (16%/11%), and analgesics (25%/12%). Percentage were identified as biosimilar-infliximab-suitable in EU.

PMS85
EFFECT OF A TIER CHANGE POLICY FOR BIOLOGIC DISEASE MODIFYING ANTIRHEUMATIC DRUGS (DMARDS) ON HEALTH CARE COST AND MEDICATION EFFECTIVENESS
Chastek B1, Liu P1, Shah N2, Harrison DJ2
1Optum Life Sciences, Eden Prairie, MN, USA, 2Amgen Inc., Thousand Oaks, CA, USA
OBJECTIVES: To examine biologic use, health care costs, and medication effectiveness for publicaly DMARDs before and after a 2012 policy change implementing restriction receipt of adalimumab to patients who had previously failed another biologic. METHODS: Patients newly initiating a biologic from 01/2011-3/2012, and continent enrolled for 1 year before and after the initial biologic claim (index) were identified from a large geographically diverse US health plan affiliated with Optum. Patients with a claim for rheumatoid arthritis (RA), psoriasis, psoriatic arthritis, or ankylosing spondylitis were included. Total health care costs were examined in the 1-year post-index for all patients. Medication effectiveness at 1-year was assessed in patients with RA using a previously validated claims-based algorithm. Cost and effectiveness were examined comparing patients initiating a biologic before vs. after policy implementation of adalimumab restriction (January 1, 2011). Total health care costs were inflation-adjusted using the 2013 CPI, and biologic cost was calculated using December 2013 WAC values. RESULTS: Of 46,668 patients treated with biologic DMARDs from January 2011-3/31/2012, 1,141 met all selection criteria. Patients considered biosimilar-infliximab-suitable (per clinical judgment) had been in care for relatively shorter period, had higher disease severity and a lower percentage of them used MTX (5.1%/4.4%), NSAIDs (16%/11%), and analgesics (25%/12%), to all infliximab-biosimilar-suitable patients. Further scrutiny is warranted to understand the barriers behind physician perception of biosimilar-infliximab-suitability.

PMS86
PERSISTENCE WITH FIRST-LINE BIOLOGICS USED IN RHEUMATOID ARTHRITIS IN A US MANAGED CARE POPULATION
Gut T1, Shah N2, Deshpande G1, Zhang D1, Eisenberg D2, Harrison DJ2
1HealthCore Inc, Wilmington, DE, USA, 2Amgen Inc., Thousand Oaks, CA, USA
OBJECTIVES: To examine biologic use, health care costs, and medication effectiveness for first-line biologic DMARDs before and after a 2012 policy change implementing restriction receipt of adalimumab to patients who had previously failed another biologic. METHODS: Patients newly initiating a biologic from 01/2011-3/2012, and continent enrolled for 1 year before and after the initial biologic claim (index) were identified from a large geographically diverse US health plan affiliated with Optum. Patients with a claim for rheumatoid arthritis (RA), psoriasis, psoriatic arthritis, or ankylosing spondylitis were included. Total health care costs were examined in the 1-year post-index for all patients. Medication effectiveness at 1-year was assessed in patients with RA using a previously validated claims-based algorithm. Cost and effectiveness were examined comparing patients initiating a biologic before vs. after policy implementation of adalimumab restriction (January 1, 2011). Total health care costs were inflation-adjusted using the 2013 CPI, and biologic cost was calculated using December 2013 WAC values. RESULTS: Of 46,668 patients treated with biologic DMARDs from January 2011-3/31/2012, 1,141 met all selection criteria. Patients considered biosimilar-infliximab-suitable (per clinical judgment) had been in care for relatively shorter period, had higher disease severity and a lower percentage of them used MTX (5.1%/4.4%), NSAIDs (16%/11%), and analgesics (25%/12%), to all infliximab-biosimilar-suitable patients. Further scrutiny is warranted to understand the barriers behind physician perception of biosimilar-infliximab-suitability.

PMS87
ANALYSIS OF ETANERCEPT TREATMENT PATTERNS AND REIMBURSEMENT GAPS IN PATIENTS WHEN TRANSITIONING FROM PRIVATE TO PUBLIC DRUG PLANS
Million B1, Poulin-Costello M1, Garcia K2
1IMS Brogan, Kirkland, QC, Canada, 2Amgen Canada Inc., Mississauga, ON, Canada
OBJECTIVES: To estimate the rate of gaps in reimbursement when an etanercept patient transitions from private to public plans, and describe their treatment patterns and lines of therapy. METHODS: A retrospective cohort of medication transaction data (IMS Brogan Lifelink® database) from Ontario and Quebec pharmacists were analyzed. Patients without a biologic prescription from a private plan (index date) was between 01/01/2010 and 06/30/2013 and their first transaction from a public plan was within one year from the index date. The gaps in reimbursement were the difference between the index date plus days’ supply and the date of the first public etanercept transaction. RESULTS: Of 474 patients included, 432 continued a DMARD or biologic in their public plan and with 1 year of follow-up, 98% of these patients had a claim. Patients with a claim from Ontario, 40% male. 73% had rheumatoid arthritis (RA) and 70% were <65 years. 75% had a gap in reimbursement (median = 21 days). 25% had an exitation, or gap, or an overlap in dispensed prescriptions, while 98% stopped their therapy altogether. Of patients who continued etanercept therapy on a public plan, 45% had a gap in coverage that would be considered a clinically meaningful delay in treatment (>21 days). For etanercept patients who continued therapy for at least 1 year, 71% progressed to etanercept a DMARD, 5% to another biologic a DMARD, and 23% to a DMARD only as their first line public therapy. CONCLUSIONS: A clinically significant number of patients experienced a meaningful gap in etanercept coverage which can achieve in suboptimal clinical outcomes. Over 20% of patients revert back to DMARD therapy for a public plan even after previously receiving a biologic. Almost 10% do not continue RA treatment on a public plan.

PMS88
CANCER-PUBLIC SUBREIMBURSEMENT OF SUBSEQUENT ENTRY BIOLOGICS (SEB) BIOLOGICS
Saik GC, Wyatt G
1Wyatt Health Management, Oakville, ON, Canada
OBJECTIVES: To provide an overview of the new Common Drug Review (CDR) reimbursement process in Canada for subsequent entry biologics for the treatment of inflammatory diseases (CDRMT). To illustrate the Canadian Drug Expert Committee (CDEC) recommendation from the first monoclonal antibody SEB (infliximab SEB), infliximab SEB (infliximab SEB) and other SEB for the treatment of inflammatory diseases in Health (CDADTH); to illustrate the Canadian Drug Expert Committee (CDEC) recommendation from the first monoclonal antibody SEB (infliximab SEB), infliximab SEB (infliximab SEB) and other SEB for the treatment of inflammatory diseases in Health (CDADTH); to illustrate the Canadian Drug Expert Committee (CDEC) recommendation from the first monoclonal antibody SEB (infliximab SEB), infliximab SEB (infliximab SEB) and other SEB for the treatment of inflammatory diseases in Health (CDADTH); to illustrate the Canadian Drug Expert Committee (CDEC) recommendation from the first monoclonal antibody SEB (infliximab SEB), infliximab SEB (infliximab SEB) and other SEB for the treatment of inflammatory diseases in Health (CDA

A168