direct costs (versus 0) and the probability that patients with positive costs spent
more than 4000 (versus less than 4000). RESULTS: Out of the 3494 questionnaires
mailed 1189 (34.0%) were returned and fully completed. The mean age of respondents
was 53.1 years (SD 8.6); 85.4% were women and the mean RA duration was 14.7
years (SD 10). At the time of the survey, 49.9% of respondents were declared being
on RA work disability receiving pension invalidity. A total of 45.3% of
employed patients had at least one sick leave over the past 6 months, with on
average a cumulative duration of 11.6 days over the average annual estimated indi-
rect cost was €3210 (74.4% RA-related work disability and 25.6% due to RA sick
leaves). The three main risk factors associated with higher costs were: failure of
at least one biototherapy (Odds Ratio-OR = 4.8), RA poor functional status (severe HAQ
versus mild HAQ, OR = 3.8) and on-going treatment (disease-modifying antirheumatic
drugs versus other, OR = 3.5). A high level of education is protective (OR = 0.6).
CONCLUSIONS: Pursuing preservation of functional status by treating patients
earlier before irreversible joint damages could both improve patients’ work conditions
and lead to potential savings for the Health Insurance.

PM565

COMPARISON OF STAFF RESOURCES AND PATIENT TIME REQUIRED FOR RITUXIMAB AND INFILXIMAB ADMINISTRATION IN 3 UK NHS HOSPITALS

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OBJECTIVES: Rituximab and infliximab are biologic disease modifying anti-
rheumatic drugs (DMARDs) used to treat rheumatoid arthritis (RA). Rituximab is re-administered on symptoms and symptoms return, but infliximab has fixed dosing intervals.

This 3-centre observational study was to determine the secondary care resource and patient time implications of this difference. METHODS: Medical records of 44 patients with RA, treated with infliximab (n = 26) or at least 2 courses of rituximab (n = 18) were reviewed retrospectively to determine mean time between end of 1st rituximab course and start of the 2nd, and numbers of visits and investigations for both drugs. Staff and patient time required for drug administration was measured prospectively by direct observation of 25 patients receiving infliximab (n = 13) or rituximab (n = 12). RESULTS: Mean time between end of 1st and 2nd courses of rituximab was 43 weeks (range 15-84). During this time a mean of 6.9 (range 4-8) infliximab infusions was administered. Rituximab-treated patients required 2 visits for drug administration during this time, vs. infliximab 6.9 visits. Each visit required a mean of 7.2 minutes of staff time for rituximab patients vs. 46.0 minutes for infliximab. Total staff time per patient over 43 weeks was 2.9 hours for rituximab vs. 5.3 hours for infliximab. Mean total patient time in the unit per 43 weeks was 14.1 hours for rituximab vs. 25.3 hours for infliximab. CONCLUSIONS: Although rituximab requires almost twice as much staff time per visit for its administration as infliximab, it is administered less often so staff time required over a whole course is less for rituximab than infliximab. An even greater difference was seen for patient time spent on the unit for drug administration. This study demonstrates benefits from rituximab in terms of patient convenience and staff efficiency, which can inform NHS planning of service delivery and quality standards for patients with RA.

PM566

ANALYSIS OF HOSPITAL EVENTS MEANING IATROGENICITY, ANHEMIA

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OBJECTIVES: Anaemia is prevalent among old individuals. Iron deficiency due to chronic gastrointestinal loss is a frequent cause. -Non-sterosidal anti-inflammatory drugs (NSAIDs) is a major cause of bleeding among osteoarthritis (OA) patients. Analysis of Hospital Events Meaning Iatrogenicity (ANHEMIA) study aims at assessing the demographic characteristics of anaemia in French OA patients and its impact on hospital length of stay (LOS).

METHODS: Programme de Médicalisation des Systèmes d’Information (PMSI) database covers French hospital activity and is used by Health Authorities as resources use indicators for allocating and forecasting medical budget. In use to assess the epidemiological and economic burden of illness is recom-
mended. Cross-linkage through the ICD-10 diagnosis codes allowed the identification of hospital stays with a main diagnosis of osteoarthritis (OA) and Among these, 2 subpopulations according to the existence or absence of iron-deficiency anaemia (AN- or AN+). ICD-10 diagnosis cancers were excluded. Four groups were established for analysis: OVA+AN-, OVA+AN+ in either private or public hospitals (PrH, PuH). RESULTS: All the groups analysis showed a higher percentage of women (p < 0.001): 2 out of every 3 patients. In PuH, mean age of OVA+AN+ patients was 73.5 years vs. 65.3 for OVA-AN+ patients, in PuH: 90.0 years (OVA+AN+) vs. 58.3 (OVA-AN+). Overall, OVA+AN- patients were significantly older than 65 compared to OVAAN+ patients: 88.1% vs. 68.7% (p < 0.001) both in PrH or PuH. Compared to OVA-AN+ patients, OVA+AN- patients had a longer LOS: 2.58 days in PuH 1.49 days in PrH for OVA+AN+ patients. The increase in LOS was accountable for substantial extra costs: €791,504 for PuH and €760,080 for PrH for the year 2006. CONCLUSIONS: Anaemia, is an important driver for extra-costs in hospitalized OA population. Since this population is likely to grow in the forthcoming years, every effort to reduce its incidence of anaemia should be considered.

PM567

THE EFFECT OF MEDICATION CHOICE BETWEEN DULOXETINE AND PREGBALIN ON MEDICATION COMPLIANCE AND DIRECT CARE COSTS AMONG PATIENTS WITH FIBROMYALGIA

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OBJECTIVES: To examine the effect of medication choice between duloxetine and pregabalin on medication compliance outcomes as well as direct health care costs among patients with fibromyalgia.

METHODS: A retrospective cohort study design was used with a large US national commercial health care claims database over 2005-2007. Fibromyalgia patients aged 18-64 who initiated (no pill coverage in the previous 90 days) duloxetine or pregabalin in 2006 were selected, with the first initia-
tion date as the index date. All patients included had continuous enrollment in the 12

PM556

GRAND: THE GERMAN RETROSPECTIVE COHORT ANALYSIS ON NON-ADHERENCE AND ASSOCIATED RISK OF FRATURES IN OSTEOPOROSIS PATIENTS TREATED WITH ORAL BISPHOSPHONATES

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OBJECTIVES: To estimate the influence of non-compliance on the risk of fractures in German osteoporosis patients treated with oral bisphosphonate (ObP) therapy.

METHODS: IMS® Disease Analyzer database was used; includes 11 million patients from office-based physicians. Eligible osteoporosis patients (excluding malignant dis-
cases, any anticancer or cytostatic hormone prescription, Paget’s disease or AIDS) had data available 21-year before and after initiating ObP treatment (December 2004-
November 2007). Compliance was measured as Medical Possession Ratio (MPR; prescribed to assumed number of therapy units). MPR > 80% assumed compliance. MPR was calculated for patients 2 years up to 2 years. Fractures were identified by ICD-10 codes; only fractures 3 months after initiating ObP were included. The influence of compliance on time to fracture was determined by Kaplan-Meier and Cox regression analyses. The model was adjusted for gender, age, prevalence of fractures 1 year before index prescription, calcium/vitamin D co-prescription, continuation of the initial regimen after 6 months and after 1 year. RESULTS: A total of 4738 patients’ data were analyzed: 1365 (28.8%) with previous fractures. The total number of patients receiving ObP treatment was 177 (3.7%) daily, 4367 (92.2%) weekly and 194 (4.1%) monthly. After 2 years, 14.5% (daily), 12.2% (weekly) and 9.7% (monthly) of patients experienced a fracture. The time to fracture was significantly longer for compliant versus non-compliant patients (log rank test; p = 0.013). Compli-
ance was associated with a 26% (95% CI 10–39%) decrease in the fracture rate versus non-compliance. Higher age (>60 years) (44% increase; 95% CI 3–100%) and previ-
ous fractures (29% increase; 95% CI 5–57%) were associated with a significantly higher risk of fractures. CONCLUSIONS: Patients receiving ObP therapy who are compliant have a decreased risk of fractures versus non-compliant patients. Older patients and those with fracture history are particularly at risk of fracture. These findings highlight the need to improve compliance to reduce the risk of osteoporosis-
associated fractures.