ARTHRITIS/OSTEOPOROSIS—Economic Outcomes

PAR6

ECONOMIC ANALYSIS OF NOVEL DISEASE-MODIFYING ANTI-RHEUMATIC DRUGS (DMARDS) FOR RHEUMATOID ARTHRITIS (RA) PATIENTS IN A MANAGED CARE SETTING

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OBJECTIVE: The purpose of the study was to assess cost-effectiveness of novel DMARDs for RA therapy from the managed care perspective. **METHODS:** Utilizing a claims database, RA patients initiated on various dose regimens of leflunomide (LEF), etanercept (ETA) and infliximab (INF) in 1999 or 2000 were followed for 12 months post drug index date and mean RA-related direct medical charges were calculated for each study cohort. Twelve-month estimates of the American College of Rheumatology response criteria (ACR 20) and mean change in the Health Assessment Questionnaire Disability Index (HAQ DI) were used as effectiveness measures from published clinical trials. Average (CE) and incremental cost-effectiveness (ICER) ratios were calculated and one-way sensitivity analyses were performed. **RESULTS:** Mean RA-related direct medical charges (95% CI) for LEF, ETA and INF for 1-year of therapy post-index date were $16,107 (14654, 17856), $25,550 (24251, 26711) and $55,195 (49928, 60305). Twelve-month ACR 20 estimates were 52%, 72% and 42% and mean changes in HAQ DI were –0.45, –0.62 and –0.29, respectively. The LEF CE [ACR 20] was $30,976 compared to $35,486 (ETA) and $131,417 (INF) while LEF CE [HAQ DI] was $35,794 compared to $41,210 (ETA) and $190,329 (INF). Sensitivity analyses of key parameters: cost, ACR20, HAQDI did not influence the rank order of results. Worst-case estimates for LEF [ACR 20 = 0.51; HAQ DI = –0.41] resulted in a CE of $31,583 and $39,286, which was lower than the base-case CE of ETA and INF. The ICER for ETA vs. LEF was $47,213 [ACR 20] and $55,544 [HAQ DI]. Both LEF and ETA dominated INF. **CONCLUSION:** Evidence from the economic analysis demonstrates that LEF is a cost-effective alternative among novel DMARDs for RA patients in a managed care setting.

PAR7

ASSESSMENT OF THE BURDEN OF RHEUMATOID ARTHRITIS IN FRENCH HOSPITALS: ANALYSIS OF THE PMSI DATABASE

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OBJECTIVES: Rheumatoid arthritis (RA) affects 1% of adults in the developed world, impacting on functional activities and life expectancy. The burden of RA is significant, with substantial direct medical costs and indirect costs, such as time off work and exclusion from the workforce. Treatments include medication, functional rehabilitation and surgery. The objective was to assess the hospital resource use and costs for treating RA in France, from a health insurance perspective. **METHODS:** Using the national hospital activity database, PMSI, patients with either a primary, secondary or related RA diagnosis were identified and their hospital care analysed. PMSI data covers almost all public and private hospitals in France, providing Health Authorities with activity indicators for budget allocations. RA admissions were selected by ICD-10 codes M05 and M06 and analysed by primary, secondary and related RA diagnoses. Hospital activity captured included procedures undertaken and occupied bed days, and was separated into public and private hospital activity. Comorbidities and DRGs represented were also identified. **RESULTS:** In 2000, 51,985 admissions were related to RA. Public hospitals accounted for 75% of admissions; 74% were women. Procedures were performed in 70% of admissions, with an average of 3.6 per admission. Of these, 3,118 were RA-related joint procedures. The mean length of stay was 6.4 days +/–10.1, corresponding to 329,098 occupied bed days. Twenty-four percent of bed days were due to primary RA and 71% to secondary RA. Main DRGs were 341 and 340 (connective tissue diseases), 808 (diseases of the musculoskeletal system and connective tissue, ambulatory treated) and 295 (major intervention on joint replacement), which accounted for 83% of primary RA admissions and cost €31 million (80% of primary RA cost). **CONCLUSIONS:** The burden of RA is significant in the French healthcare system, with high hospital resource use, including costly joint replacement procedures.

PAR8

COST BURDEN OF HIP AND KNEE REPLACEMENTS IN OHIO AND IN THE UNITED STATES: ESTIMATED FROM THE NATIONAL HOSPITAL DISCHARGE SURVEY 2000

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