PMS25

BUDGET OF RHEUMATOID ARTHRITIS IN TAIWAN: A POPULATION-BASED ANALYSIS
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OBJECTIVES: Rheumatoid arthritis (RA) is a chronic autoimmune disease characterized by inflammation and destruction of the joints. It is associated with decreased quality-of-life in its patients, and pharmacological and non-pharmacological treatments are available. The research aims to estimate the economic burden of RA in Taiwan.

METHODS: The National Health Insurance Research Database (NHIRD), a claims-based dataset encompassing 99% of Taiwan’s population, was applied. We used a micro-costing approach for direct health care costs and indirect social costs by estimating the quantities and prices of cost categories. Direct costs included surgery, medication, medical devices, lab tests, and drugs. The costs and quantities of the direct economic burden were calculated based on 2011 data of NHIRD. We identified RA patients and a control cohort matched 1:4 on demographic and clinical covariates to calculate the incremental cost related to RA. The model was validated by absenteeism and presenteeism, which is the decreased productivity of patients. For the indirect burden, we estimated the rate of absenteeism and presenteeism from a patient survey and the average salary from official statistics. Costs were presented in 2013 USD (1 USD = 26.65 TWD).

RESULTS: A total of 41,269 RA patients were included in the database with incremental total direct cost of $80,303,920 and indirect cost of $105,320,943. This resulted in an average incremental direct cost of $1,946 per RA patient. Within direct costs, the largest burden was associated with drugs ($66,794,948, 83.2%), lab tests ($7,563,247, 9.4%), and hospitalizations ($3,128,305, 3.9%). For indirect costs, absenteeism and presenteeism costs were $12,975,857 (12.3%) and $92,345,085 (87.7%), respectively. The economic burden in indirect costs due to RA was $94,320,943, most notably, presenteeism. Efficient management of RA can improve the health status and quality of life, indeed, reduce the economic impact.

PMS26

EVALUATION OF ECONOMIC BURDEN AND HEALTH CARE UTILIZATIONS FOR UNITED STATES MEDICARE PATIENTS WITH RHEUMATOID ARTHRITIS
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OBJECTIVES: To examine the economic burden and health care utilizations of rheumatoid arthritis (RA) patients in the U.S. Medicare population. METHODS: The study sample was extracted from the National Medicare claims data from 2008 to 2010. All RA patients identified using International Classification of Disease, 9th Revision, Clinical Modification (ICD-9-CM) were searched from inception to December 2013, using terms for cost-of-illness and arthritis. Review articles were also examined. Studies that were not published in English were excluded. Data extraction included: subject characteristics, number of subjects, costs and year reported. Purchasing power parities from the World Bank were used to convert costs into United States dollars and the medical component of the US Consumer Price Index was used to convert costs to constant US dollars (2012). Data were presented as cost per person per year. RESULTS: The search yielded 510 unique studies. Nine relevant studies were identified with data from 1,340 patients with RA. Studies were divided into (1) no data (1-4), Canada (5-7), United States (8-10) and (11-15). Five studies surveyed patients’ characteristics: 2 used medical records; 2 used both. Six studies reported mean direct medical costs; range: $3,304 to $20,613. Six reported mean indirect cost; range: $3,304 to $20,613. One study of 21,910 patients reported total costs ($27,013). CONCLUSIONS: Patients diagnosed with osteoporosis in the Medicare population have a high percentage of carrier and outpatients visits. The current study evidences that high health care utilizations result in considerable expenditures.

PMS27

WHAT DETERMINES WORK PRODUCTIVITY LOSS IN RHEUMATOID ARTHRITIS (RA), CROHN’S DISEASE (CD) AND PSORIASIS (PS) IN POLAND? RESULTS OF AN寄せるシュート: WORK PRODUCTIVITY SModelA (WPSM) STUDY
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OBJECTIVES: Assessment of productivity loss caused by RA, CD and psoriasis, and comparison differences in Poland. METHODS: The participants of the M2W study were consecutive patients with diagnosed RA, psoriasis and CD, in productive age between 18-65 years, who were economically active. The analysis was based on the Health and Work Ability questionnaire, which included productivity loss during low and moderate activity in a defined seven-day period, with the use of a Swedish translation. The models were adjusted for age, sex and level of education. RESULTS: An example of the model’s cost distribution over the treatment pathway for an average patient with moderate productivity loss (1 1/2 times the country average), was compared with patients who did not undergo surgery. The remaining costs attributable to patients who undergo surgery at some point during the course of the disease. Within the latter group, stenosis was found to be associated with the highest direct costs. DISCUSSIONS: The pathway treatment for low back pain has not been modelled in a such a comprehensive manner before. However, the model demands detailed data not currently available in most countries. There is a need for further data collection to be able to provide more reliable estimates for the burden of spinal disease.