COST BURDEN OF SECOND FRACTURE IN PATIENTS WITH COMMERCIAL INSURANCE

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OBJECTIVES: To quantify individual and national estimates of the indirect costs of rheumatoid arthritis (RA), using national survey data. METHODS: This was a retrospective study using 1996–2006 data from the Medical Expenditure Panel Survey (MEPS). Individuals’ self-reported health conditions were mapped to the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) diagnostic codes. Individuals with an ICD-9-CM diagnostic code of 714.xx (rheumatoid arthritis) and other inflammatory polyarthropathies were categorized as having RA. A two-part model was specified to estimate the probability of time lost from work and annual number of workdays missed due to illness, conditional on missing at least 1 workday among employed individuals. The annual missed workdays were combined with MEPS data, earnings information to estimate individual and national indirect costs of absenteeism. RESULTS: There were 312 patients with RA (mean age = 46 years; 76% female), and 89,734 without RA (mean age = 41, 52% females). The study revealed that 67% (209/312) of individuals with RA missed work as compared with 58% (52,046/89,734) of individuals without RA (P = 0.0007). Among those individuals who missed work, individuals with RA had a mean annual number of missed workdays of 12.03 versus 7.92 for individuals without RA (P = 0.0001). Per capita indirect costs associated with the incremental difference in annual loss of workdays between those with and without RA was $50. The estimated national indirect costs of absenteeism associated with RA were $229 million per year. CONCLUSIONS: Individuals with RA have a higher probability of missing work and missing more workdays as compared to those without RA. The per capita and national annual indirect costs associated with RA are substantial. The potential of appropriate and early diagnosis and treatment of RA to reduce time lost from work and indirect costs for individuals with RA should be examined.

THE INDIRECT COSTS ASSOCIATED WITH ABSENTEEISM OF WORKING ADULTS WITH RHEUMATOID ARTHRITIS: EVIDENCE FROM UNITED STATES NATIONAL SURVEY DATA

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THE DIRECT MEDICAL COSTS OF RHEUMATOID ARTHRITIS: EVIDENCE FROM UNITED STATES NATIONAL SURVEY DATA

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OBJECTIVES: To quantify individual and national estimates of the direct medical costs of rheumatoid arthritis (RA), using national survey data. METHODS: This was a retrospective study using 1996–2006 data from the Medical Expenditure Panel Survey (MEPS). Individuals’ self-reported health conditions were mapped to the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) diagnostic codes. Individuals with an ICD-9-CM diagnostic code of 714.xx (rheumatoid arthritis and other inflammatory polyarthropathies) were categorized as having RA. Health care services included prescription medications, inpatient, outpatient, patient, emergency room, office, and home health visits. Total direct medical costs included health care costs covered within the health care system including those covered by health insurance plans and out-of-pocket (OOP) costs paid by individuals. To estimate costs, multivariable linear regression analyses were performed to compare individuals with and without RA. The cases were more likely than the controls to be diagnosed with RA (P < 0.0001). The mean annual direct medical cost per individual with RA was $4,790 and $1,332 for cases and controls. The incremental difference in annual medical costs between cases and controls was $3,458. The mean annual direct medical costs for cases and controls were $18,645 and $15,197, respectively. The mean annual losses in productivity for individuals with and without RA were $21,301 and $17,753, respectively.

COST BURDEN OF SECOND FRACTURE IN PATIENTS WITH COMMERCIAL INSURANCE

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OBJECTIVES: To quantify individual and national estimates of the direct medical costs of second fracture among Medicare patients with closed hospitalization for closed hip, vertebral, and non-hip non-vertebral (NHNV) fractures. METHODS: Case-control analysis estimating costs of second fracture, using patients with closed hospitalization for closed hip, vertebral, and NHNV fracture from 2002–2008 MarketScan® Medicare Supplemental Database. RESULTS: There were 1213 individuals with RA (mean age = 58 years; 75% female) and 160,985 without RA, (mean age = 48 years; 38% female). Annual per capita health care costs for individuals with RA were more than double those of individuals without RA ($8955 vs. $3,925; P < 0.0001). When combining health care and OOP costs, per capita direct costs increased by $11,086. The US national annual estimates of the total direct medical costs (health care, OOP) for individuals with RA were $7,9 billion ($8.36 billion, $1.54 billion). CONCLUSIONS: The direct medical costs associated with RA are substantial not only to health care payers but also to patients. The total amount which appropriate and early diagnosis and treatment of RA may reduce total health care costs for health care payers and individuals with these diseases should be examined.

COST OF SECOND FRACTURE AMONG MEDICARE PATIENTS WITH INITIAL HIP, VERTEBRAL, AND NON-HIP NON-VERTEBRAL (NHNV) FRACTURES

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OBJECTIVES: To quantify individual and national estimates of the direct medical costs of second fracture among Medicare patients with closed hospitalization for closed hip, vertebral, and non-hip non-vertebral (NHNV) fractures. METHODS: Case-control analysis estimating costs of second fracture, using patients with closed hospitalization for closed hip, vertebral, and NHNV fracture from 2002–2008 MarketScan® Medicare Supplemental Database. RESULTS: There were 312 patients with RA (mean age = 60 years; 75% female) and 160,985 without RA, (mean age = 48 years; 38% female). Annual per capita health care costs for individuals with RA were more than double those of individuals without RA ($2131 vs. $917; P < 0.0001). When combining health care and OOP costs, per capita direct costs increased by $11,086. The US national annual estimates of the total direct medical costs (health care, OOP) for individuals with RA were $7,9 billion ($8.36 billion, $1.54 billion). CONCLUSIONS: The direct medical costs associated with RA are substantial not only to health care payers but also to patients. The total amount which appropriate and early diagnosis and treatment of RA may reduce total health care costs for health care payers and individuals with these diseases should be examined.

INTEGRAL MEDICAL COST OF MUSCULOSKELETAL DISORDERS IN THE UNITED STATES: ESTIMATES FROM 2006 MEDICAL EXPENDITURE PANEL SURVEY (MEPS) DATA

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OBJECTIVES: Recent medical cost estimates of musculoskeletal disorders (MSDs) as a group have not been calculated. This study estimates the incremental direct medical cost for individuals with MSDs in the United States (US). METHODS: Retrospective analysis was conducted using the 2006 Medical Expenditure Panel Survey (MEPS) data. RESULTS: Of the 103,166 individuals sampled in 2006 MEPS data, approximately 11,129 individuals (10.58%) experienced at least one MSD. Majority of the individuals were females%, whites%, and 40 years and older. The total treatment cost for MSDs was $479,19 million in 2006 compared to $185 billion in 1996. The largest cost components were ED visits, inpatient, outpatient visits, and prescription medications. CONCLUSIONS: With increasing medical expenditures estimated at $7.47 billion, individuals with MSDs utilize significant amount of health care resources. The systematic assessment of MSDs and their associated cost is necessary to increase the awareness of MSDs prevalence in our population. There is a need for MSD-related intervention programs which can be instrumental in reducing the costly impact of MSDs on individuals’ well-being and productivity.