Abstract

Background/Purpose: Rheumatoid Arthritis (RA) was recently reported to have societal costs in the US of $18.3 billion and $39.2 billion (in 2005 dollars) without and with intangible costs, respectively. However, most indirect components were subjectively imputed. This research was designed to use objective data to quantify the incremental work absence and indirect costs associated with RA in an employed population and compare these absences and costs to controls.

Methods: Employee records from multiple large employers in the US providing data about demographics, job-related information, and health care use in the HCBS database were analyzed from 1/1/01 to 6/30/10. Patients with RA were identified by claims with primary, secondary, or tertiary ICD-9 codes of 714.xx, and the date of the first claim was considered the index date. Controls were employees without claims for RA, and their index date was defined as the average index date (by employer) among RA patients. All subjects were required to have 12 months continuous health plan enrollment. Absences and indirect costs were measured for the 12 months following each employee’s index date. All costs were adjusted to June 2010 US$. Regression modeling was used to separately compare days absent and indirect costs using 2-part models controlling for demographics, job-related variables, location, and modified Charlson Comorbidity Index.

Results: Out of more than 800,000 employees in the HCBS database, 2725 (3.79%) of employees had RA and 333,058 were controls (Table 1). The incremental indirect costs (RA minus controls, Table 2) were: Sick Leave $445, Short-term Disability $249, Long-term Disability $41 (P = .005), Workers’ Compensation $90; and Total $525. Incremental absence days (Table 2) were: Sick leave -0.18 days (P = .005); Short-term Disability: -0.35 days (P = .005); Workers’ Compensation: -0.01 days (P = .005), and Total 3.58 days. All comparisons P < .01 except where noted.

Conclusion: Employees with RA incur 71% more indirect costs than those without RA and utilize 82% more lost time.

Background

Rheumatoid Arthritis (RA) has been reported to have societal costs in the United States of $19.3 billion and $39.2 billion (in 2005 dollars) without and with intangible costs, respectively. However, most indirect components were subjectively imputed using medical claims data to estimate the societal cost of absences from work and using information from literature searches based on published data, jury awards, and life-expectancy estimates to estimate other indirect costs.

Results

- Of the more than 800,000 employees in the HCBS database, 340,740 were eligible for inclusion in the study. Of these, 2725 employees had RA, and 333,058 employees were controls (Table 1).
- The observed prevalence of RA was 0.794%.

Objective

- Here, we used objective data collected from an employed population to quantify work absences and indirect costs associated with RA to compare work absences and indirect costs between persons with RA and controls (employees without RA).
- To estimate the burden of RA in the US civilian labor force.