Ps patients had dominantly (54%) low disease activity, in RA group mostly (51%) the moderate activity was observed, while the most frequent disease activity category for CD patients was remission (39%). Mean annual cost of overall work impairment (presenteeism and absenteeism cost together) amounted to PLN 29 727 for RA, PLN 24 434 for Ps and PLN 23 682 for CD. Cost of loss of productivity due to RA ranged from PLN 36 096 per person/year for RA in remission to PLN 41 966 for RA with highly active disease. For Ps it was respectively PLN 13 846 and PLN 44 009 and for CD PLN 15 543 and PLN 63 771. CONCLUSIONS: Productivity loss among workers with Ps, CD and RA generat

**PM58**

**LONG-TERM WORK PRODUCTIVITY COSTS AMONG SUBJECTS WITH EARLY RHUMATOID ARTHRITIS - A NATIONWIDE ANALYSIS BASED ON 7,831 SUBJECTS' SICKNESS ABSENCE DAYS AND INCOME**

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**OBJECTIVES:** To estimate the long-term productivity costs (PC) and their determinants among patients with early rheumatoid arthritis (RA) available to workforce at baseline. METHODS: A cohort of subjects with early RA was created by identifying the new cases of RA from the national register of the Social Insurance Institution (SII) in Finland, who were granted a special reimbursement of anti-rheumatic medications for rheumatoid factor positive (ICD-10 code: M05) or negative RA (M06) in 2000 – 2007. The obtained dataset was enriched by cross-linking with the national databases about the subjects’ employment status during the 15 years, and permanent disability pension. The human capital approach was applied to estimate PC based on subjects’ the annual number of absenteeism days and incomes. The PC were estimated and expressed as per patient-observation year. Hurdle regression analysis was applied to study the determinants of PC. Sensitivity analyses were conducted to test the robustness of the obtained results. RESULTS: The study cohort comprised 7,831 subjects with early RA in paid jobs. Baseline characteristics of RA patients were 46 years of age (SD: 11) and 71% were women. Mean PC in the first year of RA was PLN 6,557 per subject. PC increased significantly the cumulative PC during the follow-up.

**CONCLUSIONS:** The results highlight the need for treatment strategies with predefined targets and tight control of disease activity in the early course of disease to reduce the long-term burden of RA.

**PM59**

**CHARACTERIZING WORK PRODUCTIVITY LOSS IN INCIDENT RHEUMATOID ARTHRITIS IN SWEDEN**

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**OBJECTIVES:** To study the trends in work productivity loss pre- and post-diagnosis of incident rheumatoid arthritis (RA) and compare it to patients with osteoarthritis (OA) using a Medicare replacement study. METHODS: A Medicare replacement study conducted using Swedish national registers. Patients of working age with an incident diagnosis of RA between 2003 and 2009 were identified in the National Patient Register (NPR). OA patients younger than age 65 years old, OA patients younger than age 65 years old, and OA patients younger than age 65 years old were identified during the same period and considered as a reference group (n=34260). Monthly productivity loss value was determined. Productivity loss over several months was calculated by the prospective method from the point of diagnosis and the point of diagnostic visit. Results: Monthly productivity loss gradually increased during the months leading up to RA diagnosis, peaking the month after diagnosis (mean 14.7 days/month). The same pattern was observed in the OA group in relation to time of surgery, although the increase in productivity loss the months post-surgery was considerably larger than the corresponding increase in the RA patients, peaking the second month followed by a gradual decrease. CONCLUSIONS: This study illustrates the unmet needs in RA. The partial reversal in work ability in the early course of disease to reduce the long-term burden of RA.

**PM60**

**A COMPARISON OF THE IMPACT OF RHUMATIC DISEASES AND OTHER CHRONIC DISEASES ON EARLY RETIREMENT IN PORTUGAL**

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**OBJECTIVES:** The aim of this study was to compare the impact of chronic rheumatic diseases (RD) may lead to early retirement, generating substantial indirect costs to society. We compare RD to other major chronic diseases regarding their impact on the likelihood of early retirement in the Portuguese population. METHODS: The study population consisted of all people between age 50 and 64 years and 8411 women and 771 men who participated in the Portuguese National Health Survey, conducted in 2005/2006. Self-reported data were collected on health, sociodemographic and occupational factors. The effects of RD and other chronic diseases and in particular the likelihood of early retire

**PM61**

**COST OF PHARMACOTHERAPY IN POLISH PATIENTS WITH RHUMATOID ARTHRITIS**

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**OBJECTIVES:** To assess cost of pharmacotherapy in Polish patients with rheumatoid arthritis (RA) in relation to disease activity (DAS28-CRP) and disability (HAQ-DI). METHODS: Data on drug consumption was collected during a prospective one center observational study of non-selected RA patients discharged from tertiary academic hospital. At enrollment patients were divided according to DAS28-CRP and HAQ-DI. Observation period was 6 months. Spearman rank correlation coefficient and test of its significance were used to investigate the relationship of cost of pharmacotherapy with disease activity and disability. Mean total cost of drugs and mean cost of drugs covered by public payer were calculated in PLN at 2014 prices (1 EURO=4.2 PLN in 2014). RESULTS: DAS28-CRP was ≥5.1 in 124 patients (group A) and ≥5.1 in 83 patients (group B). HAQ-DI was ≥2 in 51 patients (group 1), ≥1 ≤2 in 88 patients (group 2), ≥2 in 66 patients (group 3). Mean cost of pharmacotherapy per patient was 1010 PLN in group A and 858 PLN in group B, 1078 PLN in group 1, 981 PLN in group II and 745 in group III. The differences between groups were not statistically significant. Public payer covers only 36-40% of the drugs cost. CONCLUSIONS: These results represent the current use of drugs in the population of Polish RA patients under real-life conditions and indicate that there is no impact of disease activity and disability on the cost of pharmacotherapy due to RA.

**PM62**

**ORGANIZATIONAL AND MANAGEMENT IMPACT ANALYSIS IMPACT OF THE NEW SUBCUTANEOUS FORMULATION OF TOCILIZUMAB IN SELECTED ITALIAN RHEUMATOLOGY CENTERS**

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**OBJECTIVES:** In the light of future arrival of subcutaneous (SC) formulation of tocilizumab for the treatment of moderate to severe active rheumatoid arthritis, a new SC formulation of tocilizumab is being developed. We evaluated the impact of introducing SC formulation vs. intra-venous (IV) one from the perspective of both hospitals and patients in Italy. METHODS: The analysis was conducted in three Italian Rheumatology centers (AO A. Nasi-Bologna, AO-Verona, Università di Modena e Reggio Emilia) through a questionnaire administered to clinicians and nurses. A 60 minutes-day hospital administration for IV and 20 seconds-1 minute administration for SC self-injector or pre-filled syringe administer at home (excluding the first administration) were assumed. Monitoring visits were considered as 1 per month for IV and 1 every three months for SC. Four impact areas were evaluated: patient’s drug administration time and costs (including transportation time and cost and loss of productivity), drug-administration related hospital personnel-time, drug waste and patient risk profile evaluated through Failure Modes and Effect Analysis. A one year time horizon was considered. RESULTS: The analysis showed that the new SC formulation, compared to IV, could have a significant impact in terms of: patient time saving (- 91% of the time for the administration of therapy), patient costs saving (-86%), clinicians and nurses time saving measured as Full Time Equivalent (- 59% for clinicians and - 94 % for nurses), drug wastage (-100%), and patient risk profile -90%. CONCLUSIONS: The subcutaneous formulation of tocilizumab could have substantial organizational and management impacts. From the hospital perspective it could lead to reduction of medical resources consumption with the possibility to re-allocate them in other medical activities. From the patient perspective the new SC formulation could lead to time savings and costs reduction with a potential improvement of patient quality of life.