Objectives: To evaluate the feasibility and benefit of improving medical economics and disease activity outcomes in rheumatic patients through online consultation based on SSDM by rheumatologist.

Methods: The rheumatologists implemented the education and training programs on patients in using SSDM and assist the patients in downloading the SSDM mobile application. The SSDM includes doctors' and patients' interfaces. The patients' terminal includes serial self-assessments (DAS28, SLEDAI, HAQ), medication management, adverse events management and lab records. After data entry, data synchronizes to the mobile of the authorized doctor. On the basis of these data, the rheumatologists can accept the request from their follow-up patients and practice consultation through SSDM in the form of text or voice.

Results: From Feb 2015 to Jan 2019, 679 rheumatologists supplied 7,405 patients (RA 35%, SLE 23%, AS 9.5%, gout 8.8%, Sjogren syndrome 3.8%, OA 3.4% and other 16.5%) with 10,527 consultations. The consulting fee ranged from RMB 0 to 500 yuan (USD: RMB =1: 6.81) each in average of 78.10 ± 45.12 yuan, which match the registration fee in hospital. The total fee for consultations was 822,169 yuan RMB. 37% patients receiving online consultation lived in different cities from the rheumatologists. If the patients seek medical care in hospital, in addition to the registration fees and medical expenses, the mean cost of transportation, accommodation, and lost wages was 577.48 ± 505.21 (200 - 2,800) yuan. The total of cost for all patients would have been 6,079,135.00 yuan RMB, which is 7.39 times more compared with the cost of online. Among 2,611 RA and 1,671 SLE patients with repeat self-evaluations who were followed up for over 90 days, the treat-to-target rate improved from 28% to 45% (DAS28 $\leq$ 3.2) and from 41% to 70% (SLEDAI $\leq$ 4), respectively. Survey shows that satisfaction rate with the consultations is 100%.

Conclusion: Through online disease management and consultations using SSDM, Chinese patients with rheumatic diseases enjoy good quality of care at lower cost with high satisfaction. Armed with data science, SSDM may supply the rest world with an option for reshaping the healthcare system.

Disclosure of Interests: None declared

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AB1237

COST OF ILLNESS AND QUALITY OF LIFE IN ANKYLOSING SPONDYLITIS PATIENTS TREATED WITH ADALIMUMAB IN CHINA

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Background: Ankylosing spondylitis (AS) is a chronic inflammatory disease which may lead to limited physical function, impaired quality of life and increased economic burden for society. There were many studies about the superior effects of biologic agents on symptom release, disease activity and functional remission in AS patients. However, studies on the economic burden and health-related quality of life of AS patients in China were spark.

Objectives: To access the cost of illness, work limitation and quality of life in active ankylosing spondylitis (AS) patients using adalimumab in China.

Methods: A prospective study was performed in 91 patients with active AS in China. Adult patients (aged ≥ 18 years) fulfilled the 1984 New York modified criteria of AS with the Bath Ankylosing Spondylitis Disease Activity Index (BASDAI) ≥ 4 and C reactive protein (CRP) ≥ 6 were enrolled from rheumatology center from Jan 2017 to Aug 2017. All participants received adalimumab (40mg per 2 weeks) therapy and completed questionnaires about disease characteristics, quality of life, direct and indirect costs. Only patients with pay-work completed the Work Limitation Questionnaire (WLQ) to accesses the impact of chronic health conditions on job performance and productivity. Quality of life was measured using the Ankylosing Spondylitis Quality of life (ASQoL) and EuroQoL-5 Dimensions (EQ-5D).

Results: A total of 91 patients with mean age of 30 years old (87.8% males) and mean disease duration of 10 years received adalimumab treatment for 24 weeks. 78.02% of patients have a paid job with average work productivity loss of 28% measured by WLQ. The annual estimated costs of each patient were \$35238.8 while the direct cost accounted for 90.2% and the cost of medication accounted for 78.6%. There were significant differences in change of ASQoL (change, 3.89 [95%CI, 3.06 to 4.71]; $P<0.0001$) and EQ-5D (change, -0.19 [95%CI, -0.24 to -0.31]; $P<0.0001$) scores from baseline and 24 weeks, with more improvements after therapy compared with baseline. Cost of illness was estimated as

\$21927.38 per quality-adjusted life year and \$15728.16 per BASDAI unit, respectively.

Conclusion: The cost of AS patients treated with adalimumab therapy was high in China and symptoms and QoL improved significantly after therapy.

Disclosure of Interests: None declared

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AB1238

PATIENTS' PERCEPTIONS OF SUPPORT PROGRAMS FOR THE TREATMENT OF CHRONIC INFLAMMATORY DISEASES

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Background: Adherence to therapy in chronic diseases such as inflammatory rheumatic diseases (CIRD), inflammatory bowel diseases (IBD) and psoriasis (Pso) is a major condition to achieve positive outcomes. Patient support programs (PSPs) were developed to improve the quality of care and enhance adherence to therapy.

Objectives: To evaluate the perception of patients treated for inflammatory chronic diseases towards PSPs.

Methods: All available PSPs were identified at the national level, and their services were classified into categories: financial, logistic, educational, and emotional support. Consecutive adult patients with CIRD, IBD and Pso, enrolled in a PSP for more than 3 months, were interviewed by a trained medical student. Demographic data, disease and treatment characteristics were collected at the physician's clinic. Global satisfaction was estimated using a 5-points Likert scale, adherence to treatment was measured by the Compliance Questionnaire for Rheumatology (CQR), PSPs services were classified according to their importance to the patient using a 5-points Likert scale. An open questionnaire identified the patients' perceptions qualitatively. Predictive factors of satisfaction were identified.

Results: Forty-seven patients were included in the study, 53% were males, with a mean age of 49.8 years (SD 15.2) (Patients' characteristics in Table 1). The majority declared that the PSP was very useful (95.7%) and were highly satisfied with the programs (97.9%). Higher attributes were assigned, by decreasing order, to: financial (copay program, providing of free samples), logistic (hotline, refrigerating box), educational (educational material) and emotional support. Nursing services and telephone reminders were rated as least important (Figure 1). Most open comments gave higher appreciation to financial support (54%), followed by education (38%) and logistics (8%). High appreciation of education was associated with lower age, type of treatment and PSP. Shorter treatment duration was associated with appreciation of educational material, emotional support and telephone reminders.

Conclusion: Patients were highly satisfied with PSP programs, and ranked the financial support as the most important followed by logistics, whereas education, nursing services and telephone reminders were found less important. Lower age and shorter treatment duration were associated with higher appreciation of education and support.

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Table 1. Patients characteristics:

N	47 patients
Disease, N (some patients have multiple diseases)	18
- Inflammatory Bowel Disease	17
- Axial Spondyloarthritis	17
- Peripheral Spondyloarthritis	13
- Rheumatoid Arthritis	13
- Psoriasis	
Age, mean (SD)	49.8 (15.2)