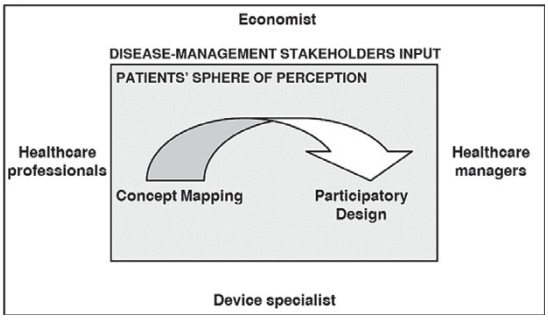
cooperation with a designer and a medical expert. This was followed by a common group session. Finally, SE was performed based on semi-structured group and individual interviews with patients and disease-management stakeholders.

Results: The study included 9 rheumatoid arthritis (RA) patients, 4 psoriatic arthritis (PsA) patients, 1 ankylosing spondylitis (AS) patient, 2 doctors, 2 nurses, 1 medical secretary, and 4 key public servants involved in the disease management of the selected rheumatic diseases. Saturation was reached after 3 CM patient workshops, generating 121 statements, which were organized by the participants into themes. Through content analysis of the results from the 3 workshops, 4 concepts were generated: technical usability, physical design, concerns, and enthusiasm. These data were used in the iterative PD sessions, resulting in 4 new proposed prototypes. Finally, SE demonstrated that the identified concepts were pivotal for both facilitating and hampering device implementation, thus creating value when introducing the new e-Device.

Figure: The Parker Model



Conclusions: Patient participation in the 3-step qualitative Parker Model identified important aspects to consider when designing and implementing an innovative device for the treatment and management of RA, PsA, and AS. This is the first time a composite, qualitative research model has been applied when introducing a new device to support these disease areas. The responses from patients and disease-management stakeholders indicated that it is key to include patient input in the design and adaptation of devices alongside education and communication with stakeholders. These resources can help ensure added value when developing devices for the management of RA, PsA, and AS using biologic medicines.

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AB1114 PATIENT'S SELF-MONITORING OF DISEASE ACTIVITY OF RHEUMATIC DISEASES VIA WEBAPP – STUDY DESIGN, PATIENT'S PERSPECTIVE AND RECRUITMENT IN THE FIRST 11 MONTHS OF THE SWISS MULTICENTRE, LONGITUDINAL COMPASS II STUDY

V.K. Jaeger[1], P. Schiffer[2], P. Zufferey[3], L. Pichler[1], A. Badaracco[4], M. Walder[5], J. Dudler[6], D. Frey[7], F. Müller[1], U.A. Walker[1]. *[1]University Hospital Basel, Basel; [2]Praxis beim Rathaus, Zofingen; [3]Lausanne University Hospital, Lausanne; [4]Studio Medico Badaracco Cattaneo, Lugano; [5]Praxis Walder, Dübendorf; [6]Hôpital Cantonal Fribourg, Fribourg; [7]Praxis Frey, Basel, Switzerland*

Background: The management of patients with rheumatic diseases is guided in part by asking patients about their medical history at each clinic visit. Patients often find it difficult to accurately remember the course of their symptoms between these appointments as they are often months apart. Regular app-based patients' self-monitoring of disease activity (with our without feedback to the rheumatologist) between clinic visits might provide a possible solution for this.

The COmPASS I study [1] demonstrated that RA patients' self-assessments of disease activity via App correlate strongly with rheumatologists' assessments. Following up on this, the Swiss based COmPASS II study is embedded in the Swiss rheumatology registry (SCQM) and hence allows the linkage of data obtained via the COmPASS II App from the patients with routine clinical data collected in the registry.

The main aims of the COmPASS II study are to assess if continuous self-monitoring of the disease by patients optimises disease management and outcome in rheumatic diseases, and to assess the fluctuation of disease activity between clinic visits.

Objectives: The objectives of this abstract are to describe the set-up and the recruitment of the COmPASS II study in the first 11 months.

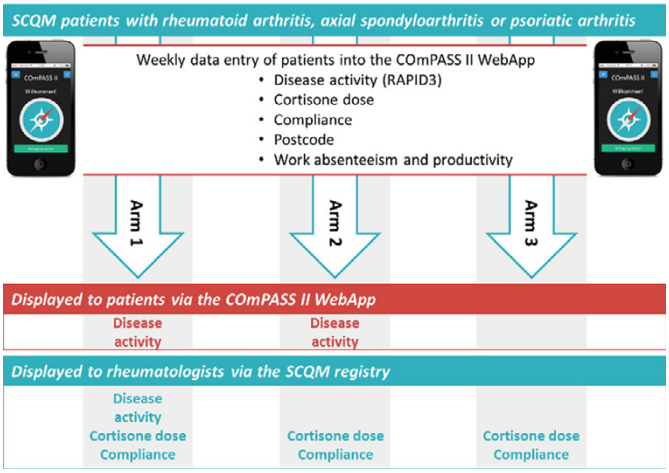
Methods: The COmPASS II App questionnaire consists of the RAPID3 score, a validated, commonly used PRO to self-assess disease activity. Additionally, patients are asked about their therapy compliance and cortisone dose.

At inclusion, interested patients with RA, axSpA and PsA are electronically randomized into 3 study arms (Figure 1). In arm 1 patients and rheumatologist are displayed the self-assessed disease activity over time, the patient directly via the App and the rheumatologist via the SCQM registry. In arm 2 only the patients are displayed their disease activity chart and in study arm 3 neither sees the recorded data. Patients are encouraged to fill in the App weekly.

Results: The COmPASS II App went online on the 15/02/2016. In the first 11 months of COmPASS II, 272 patients were enrolled by their rheumatologist. 64% of patients used the WebApp (32% in arm 1, 38% in arm 2 and 30% in arm 3); 82% of patients filled in the questionnaires for longer than a months, the longest follow-up was 11 months. On average patients use the App every 2 weeks.

Patients found the App easy to use "The COmPASS II WebApp is so easy to use. It doesn't even take me 2 min." and received feedback included "Now my rheumatologist sees how I was since the last appointment instead of me trying to remember how I was half a year ago.".

Figure 1. Design of the COmPASS II study.



Conclusions: The COmPASS II study will validate the utility of app-based patients' self-assessments in enhancing disease control in a treat to target approach and deliver numerous additional scientific data.

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AB1115 THE FEASIBILITY OF UTILIZATION OF MOBILE DEVICES TO ENHANCE PATIENT REPORTED OUTCOMES MEASURES (PROMS) IN RHEUMATOLOGY PRACTICE

V. Ognenovski[1,2], K. Burger[3], K. Weiss[4], L. Esser[4], D. Khanna[1]. *[1]Division of Rheumatology, University of Michigan, Ann Arbor, United States; [2]Rheumatology Clinic, Ss Cyril and Methodius Faculty of Medicine, Skopje, Macedonia, The Former Yugoslav Republic Of; [3]Information Technology; [4]University of Michigan, Ann Arbor, United States*

Background: Patient reported outcome measures (PROMs) are accepted modalities of gathering patient-reported health status such as physical, mental and social well-being. In addition to research applications, in some countries such as the United States, some of these measures are being considered as metrics for quality of care. The advent and wide spread use of the electronic medical record (EMR) in the United States has enabled providers (and patients) to collect PROMs electronically via patient portals (1).

At the University of Michigan, the patient medical record is maintained by MiChart- an EPIC®software which interfaces with the Patient Reported Outcomes Measures System –PROMIS (2)- an NIH funded project for development of assessment tools for collecting and analyzing patient health status. Our initial effort focused on integrating the PROMIS questionnaires into the patient EMR for two domains: Adult Physical Function and Pain Intensity Scores into patient portals (electronic patient-physician communication tool), thus enabling patient to complete questionnaires from home computers. Our collection rate of completed PROMs questionnaires via patient portals was about 5–10%.

Objectives: The aim of our project was to examine/enhance collection rate of PROMs with the utilization of portable devices /tablet based PROMs at the time of check-in the clinic by the patient.

Methods: PROMs data was collected from all patients visiting one of the outpatient rheumatology clinics at the University of Michigan from July 1,2016 – Jan 31, 2017. An Android based tablet using Welcome ® software was handed to every patient with instructions to complete a questionnaire on Adult Physical Function and Pain Intensity Score – PROMIS based questionnaires on patient-reported outcome measures. The results were stored in the patients EMR.
Results: Between July 1st 2016 and Jan 31st, 2017, we collected PROMs on patients via patient portals (home computers) and in office mobile devices-tablets. Assisted completion was done by clinic staff on a clinic desk top computer. Total of 2059 out of 2554 patients invited to participate completed the PROMs questionnaires. Of those patients that answered the questionnaires, 82% were done on a mobile device, 10% of patients used the home portal, 8% of patients needed in office assistance. 20% of patients did not answer the questionnaires.

Mode for completion of PROMs	Number of patients
Mobile Device	1694
Portal Home PC	211
Assisted in clinic	154
Total questionnaires completed	2059

Conclusions: Mobile devices are being increaseinlgy used by the patients in the United States for capture of PROMs. Mobile devices increased the PROMs collection rate from approximately 10% to 80% when combining both home portal (home PC) and an office based mobile device (Tablet). Mobile devices alone accounted for >80% of the collection rate of PROMs. In an era of changing information technology, the utilization of mobile devices for PROMs should be explored as a preferred modality.
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Disclosure of Interest: V. Ognenovski: None declared, K. Burger: None declared, K. Weiss: None declared, L. Esser: None declared, D. Khanna Grant/research support from: Bayer, BMS, Genentech/Roche, Sanofi-Aventis, NIH K24AR063120, Consultant for: Actelion, Bayer, Covis, Cytori, EMD Serono, Genentech/Roche, Gilead, GSK, Sanofi-Aventis
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Epidemiology, risk factors for disease or disease progression

AB1116 PREVALENCE OF POLIAUTOIMMUNITY AND FAMILY AUTOIMMUNITY IN MEXICO

A. Arellano-Martinez, V. Gonzalez-Diaz, S. Cerpa-Cruz, S. Gutierrez-Ureña, J. Reyes-Rueda, K. Garcia-Osuna, G.E. Martinez-Bonilla. *Rheumatology Service, Hospital Civil Fray Antonio Alcalde, Guadalajara, Mexico*

Background: Autoimmune diseases share pathophysiological mechanisms, genetic factors and certain environmental triggers. Its frequency is reported up to 43% for poliautoimmunity and almost half of these have family autoimmunity, but this is unknown in our population.
Objectives: To identify the prevalence of poliautoimmunity and family autoimmunity in a Rheumatology Service of a third level hospital in Mexico.
Methods: Observational, descriptive, cross-sectional study. Consecutive outpatients who attended the Rheumatology Service of the Hospital Civil de Guadalajara "Fray Antonio Alcalde" during 2 months were applied a questionnaire to obtain demographic data, autoimmunity and risk factors. Descriptive statistical analysis was done.
Results: Of 1,208 patients, 484 (40%) had autoimmunity, of these 58 (12%) had polyautoimmunity and 6 (1%) with Multiple Autoimmune Syndrome (MAS). The most frequent of 35 autoimmune diseases registered were: RA 42%; SLE 17%; AS 6%; SSc 5%; SSj 4%; PsA 3%; JIA 3%; autoimmune hypothyroidism 3%; APS 2%; Dermatomyositis 2% and Psoriasis 1%. In the group with polyautoimmunity SLE was present in 26 (45%) patients, SSj in 13 (22%) and autoimmune thyroid disease in 14 (24%). In the MAS group autoimmune thyroid disease in 5 patients. Patients with polyautoimmunity developed first: SLE (14%) and RA (14%). In the patient with MAS autoimmune thyroid disease in 33%. Of the 58 patients with poliautoimmunity 31 (53%) have familial autoimmunity, of which SLE is the most frequent in (22%), followed by autoimmune thyroid disease (17%) and RA (16%). All 6 MAS patients had familial autoimmunity. Referent to risk factores: 154/484 reported active smoking. Of the 58 patients with poliautoimmunity, only 23 (40%) had or are current smokers. Of the 6 patients with MAS 50% presented this risk factor.158/484 (33%) patients had periodontal disease. In patients with autoimmune disease 54% were overweight (28%) or obese (26%). Of the 58 patients with poliautoimmunity 48% were overweight and 21% obese; of patients with MAS 50% were overweight or obese. Only one patient had ASIA syndrome with GCA diagnosed.
Conclusions: The search of polyautoimmunity is required in all patients with autoimmune disease and convenient to consider that these patients will have a higher frequency for familial autoimmunity. Smoking and periodontal disease are widely known risk factors that are no taken serious by patients.
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Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2017-eular.6952

AB1117 LATENT TUBERCULOSIS INFECTION AND TUBERCULOSIS IN PATIENTS WITH RHEUMATIC DISEASES UNDER TREATMENT WITH ANTI-TUMOR NECROSIS FACTOR DRUGS

A.L.B. Morsch [1], G. Garziera [2], F. Otesbelgue [3], F.L. Staub [3], P.E. Palominos [1], C.V. Brenol [1,3], D.R. Silva [2,3,4]. *[1] Serviço de Reumatologia; [2] Programa de Pós-Graduação em Ciências Pneumológicas, Hospital de Clínicas de Porto Alegre; [3] Faculdade de Medicina, Universidade Federal do Rio Grande do Sul; [4] Serviço de Pneumologia, Hospital de Clínicas de Porto Alegre, Porto Alegre, Brazil*

Background: The introduction of biological agents, especially the tumor necrosis factor inhibitors (anti-TNF) for the treatment of rheumatic diseases increased the risk of developing tuberculosis (TB). Screening for latent TB infection (LTBI) is strongly recommended before starting therapy with anti-TNF agents.
Objectives: This study aimed to identify the prevalence of LTBI and TB among patients with rheumatic diseases on anti-TNF drugs.
Methods: In a cross-sectional study, the electronic medical records of all adult patients (≥18 years old) undergoing anti-TNF treatment at Hospital de Clínicas de Porto Alegre, Porto Alegre, Brazil, were reviewed. Every patient underwent Tuberculin Skin Test (TST) before starting anti-TNF treatment.
Results: In total, 176 patients were included. The mean age was 51.9±12.4 years, 34.7% were males, and 90.9% were white. The underlying diseases were rheumatoid arthritis (RA) in 50.6% (N=89), ankylosing spondylitis (AS) in 27.8% (N=49) and psoriatic arthritis (PsA) in 17.6% (N=31). Anti-TNF agents started after TST were: infliximab (22.7%, N=40), adalimumab (48.9%, N=86), etanercept (27.3%, N=48), and golimumab (1.1%, N=2). The prevalence of positive TST was 29.5%. Household contact with TB was significantly associated with a positive TST (p=0.020). RA patients had lower TST reactions than AS patients (p=0.022). There were six cases of TB (3.4%) diagnosed during anti-TNF therapy.
Conclusions: We demonstrated a high prevalence of positive TST (29.5%) among patients with rheumatic diseases in a region with high TB prevalence. Our data corroborates the ACR's recommendation that patients who live in high TB incidence settings should be tested annually for LTBI.
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Disclosure of Interest: None declared
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AB1118 REVIEW OF METHODS FOR ASSESSING THE RELATIONSHIP BETWEEN WEATHER AND CHRONIC MUSCULOSKELETAL PAIN

A. Beukenhorst [1], J. McBeth [1], D. Schultz [2], J. Sergeant [1,3], W.G. Dixon [1]. *[1] Arthritis Research UK Centre for Epidemiology, Centre for Musculoskeletal Research; [2] Centre for Atmospheric Science, School of Earth and Environmental Scie nces, University of Manchester; [3] NIHR Manchester Musculoskeletal Biomedical Research Unit, Central Manchester University Hospitals NHS Foundation Trust, Manchester, United Kingdom*

Background: People with chronic pain commonly believe that their pain is affected by the weather. Despite a century's worth of research, there is no scientific consensus on the existence of a relationship between weather and chronic pain.
Objectives: A systematic literature review to (1) gain an overview of existing research on the weather-pain relationship, and (2) summarise the methodologies, methodological rigour and risk of bias in published studies of patients with musculoskeletal conditions.