Results: In models that included DAS28 as a continuous measure, using claims alone explained 11% of the DAS28 variability. Adding medications and EMR data to claims improved the adjusted R^2 by 6% (table 1). In models that included DAS28 as a binary outcome (moderate/high activity vs low activity/remission), our claims-only model yielded a C-statistic of 0.68, which increased to 0.79 after inclusion of medications and EMR data.

Abstract OP0010 – Table 1. Model Fit Statistics for Continuous DAS28 (CRP) (Adjusted R^2) and Binary Categories (Moderate/High vs Low/Remission; C-Statistic)*

	Model 1: claims only	Model 2: claims +Medicare medications	Model 3: claims +Medicare and EMR medications	Model 4: EMR data**	Model 5: claims +Medicare medications +EMR data**
Adjusted R^2	0.11	0.12	0.14	0.16	0.17
C-statistic	0.68	0.74	0.77	0.76	0.79

*n=300 except for Model 2 (n=95)

**EMR data includes medications, laboratory tests, BMI, blood pressure and smoking status

Conclusions: Incorporating medications, EMR data and laboratory values into a claims-based index did not significantly improve the ability to predict DAS28 scores as a continuous measure. However, models that include claims, medications and EMR data may be used to reasonably distinguish moderate-to-high disease activity from low disease activity/remission.

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WEDNESDAY, 13 JUNE 2018

E-health for better care

OP0011-PARE A WEEK TO TWEET: FINDINGS FROM YOUNG PARE'S ONLINE COURSE FOR TWITTER NOVICES

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Background: Twitter is a social networking platform that enables individuals to publish short posts called tweets. Twitter enables individuals to reach over 270 million active users on the platform each month.¹ A useful way to develop individuals' confidence on Twitter can be through participating in tweet chats and by conversing at conferences through the use of a preselected hashtag.² Young PARE identified a need among the patient community to provide some training for individuals to get started on Twitter. This mirrored the ongoing work provided by EMEUNET for rheumatology professionals.

Objectives: The aim of the course was to deliver a structured online Twitter learning experience, and to evaluate participants' use and perceptions of the course.

Methods: The course was hosted on Mailchimp over a period of seven days, from Thursday 16 until Wednesday 22 February 2017. Participants wishing to take part signed up to the course via a form advertised by email and online. Participants received an email with a task to complete at 09:00 each day. Despite the daily prompt, the course was self-paced, enabling participants to participate at their own convenience. An anonymous evaluation survey, hosted by bos, was distributed to participants immediately after the course. A combination of 5-point Likert scales, multiple allowable answers and open-ended comments were employed.

Results: A total of 95 individuals subscribed to the course, with 11% responding to the survey (n=11). Of the respondents, 63.7% were aged 35 years or older. The course was rated as either good (63.6%) or excellent (36.4%), with 63.6% stating that the course met their expectations. The most favoured topics rated as strongly liked or liked by 90.9% of respondents were: (i) Using twitter at conferences; (ii) Public and protected tweets; (iii) Embedding Twitter feeds; (iv) Hashtags; and (v) Sending tweets. However, some participants felt that Twitter was not applicable to their country. Participants also provided constructive feedback for future courses; including more screenshots to guide textual prompts, and the option to house the course in a single, online location that can be accessible at any time.

Conclusions: 'A week to tweet' challenged the misconception that social media is just for young people under 35. The course provided a simplified account of Twitter, from the basics of getting started, through to more complex functions. It appeared to be a welcomed resource for twitter novices, though the instructional content could be simplified, particularly for participants whose first language is not English. Cultural issues were also raised, with some participants feeling that Twitter wasn't relevant in their country. This highlights the need for better awareness of the global functionality of Twitter, and the capabilities of this social networking platform. For future instances, course content should be accessible from an online repository, so that participants can access the course at their own pace. There may be scope for the course to be hosted under the EULAR School of Rheumatology in the future.

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OP0012-HPR CREATION OF THE FIRST DIGITAL TRAINING DESIGNED FOR PATIENTS WITH RHEUMATOID ARTHRITIS BY PATIENT ORGANISATION IN RHEUMATOLOGY

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Background: People with chronic conditions face the disease more effectively when they develop psychosocial skills and self-care. Health authorities thus recommend the organisation of therapeutic patient education (TPE)... suffering from different limitations.

Objectives: A patient organisation had the idea to develop a digital training solution, accessible everywhere, complementary to TPE, for patients with rheumatoid arthritis.

Methods: The choice was made for an online training program such as Massive Open Online Courses (MOOC).

A preliminary survey was carried out among the patients via an electronic questionnaire via social networks and an emailing to the organisation members.

A steering committee (COPIL) made up of representatives of the patients' association, expert patients and rheumatologists with the support of a specialised agency, determined the timetable, the educational objectives, the contents, the speakers and the evaluations.

Results: The initial investigation was stopped at 100 responses, obtained in 3 days. 85.9% planned to follow the MOOC on their computer, but to meet the needs of all, the device is responsive. 61% had never participated in a TPE program and 94% were interested in joining MOOC to learn new information about the disease (78.8%), treatments (71.7%), have expert views (67.7%), share experience with other patients (56.6%), and better live with the disease (50.5%).

The MOOC: Using the Learning Management System platform drspoc.com, Intervention of the experts via videos and live courses, evaluation of the achievements and, during two annual sessions, tutoring by patients trained specifically. At the beginning and end of the session, learners are invited to answer different questionnaires (knowledge, skills, satisfaction).

COPIL identified 15 experts (patient-experts, rheumatologists, occupational therapist, physiotherapist, nutritionist, social worker, psychologist, sexologist, nurse) who wrote the content of their speech. All texts have been validated by a pedagogical engineer and the director of the association.

215 people pre-registered during the month preceding the launch, 154 persons active and 446 posts shared during the first session. 217 pre-registered, 238

actives, 1 257 posts during the second sessions, tutored by peer patients with a dedicated training.

Some participants were health care professionals and their extremely positive feedbacks prove the value in offering MOOC access to every people interested in.

Conclusions: This is the first digital training strategy for people with rheumatoid arthritis. It proved to be useful to patients, offering an alternative or complement to TPE.

It will be necessary to evaluate the impact of this MOOC on the quality of life of the patients and their perception on its usefulness after several sessions. We decided to propose an e-learning version without peer patient intervention and accessible at any time in addition to the MOOC version with a specific educational path.

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EULAR projects in paediatric rheumatology and UCAN

OP0013

PREGNANCY OUTCOMES IN DMARD EXPOSED PATIENTS WITH JUVENILE IDIOPATHIC ARTHRITIS – RESULTS OF THE BIOLOGIC REGISTER JUMBO

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Background: Juvenile idiopathic arthritis (JIA) often persists into adult life. Young women and men with JIA are often still exposed to disease modifying anti-rheumatic drugs (DMARDs). Little is known about the impact of DMARDs on pregnancy and its outcome, and there has been no approved DMARD for pregnant or lactating women so far.

Objectives: To investigate the course and outcome of pregnancies in female JIA patients and male JIA patients with pregnant partners who were exposed to DMARDs.

Methods: In the JIA biologic registry JuMBO (Juvenile arthritis MTX/Biologics long-term Observation), patients (or partners of patients) with pregnancies were identified. Standardised patient interviews were conducted and the course and outcome of pregnancy inquired. In addition, prospectively collected physician-reported data were considered in the analysis.

Results: Out of the 1300 patients enrolled in JuMBO, a total of 222 pregnancies in 116 women and in 25 partners of men with JIA were reported. Until January 2018, information was available for 149 pregnancies of 96 women with JIA and for 34 pregnancies of 20 male patients with pregnant partners.

The majority of the 96 women had polyarticular JIA (75%). The median age at first conception was 24 years (ys, IQR 20–27) and the median disease duration was 14 ys (IQR 9–18). All women were ever exposed to DMARDs, 84% to a biological (b) DMARD. Among the 149 pregnancies, 64 occurred upon DMARD exposure (29 bDMARDs, 23 bDMARDs plus synthetic (s)DMARDs, 12 sDMARDs). DMARDs were discontinued in most exposed patients 6 weeks (median, IQR 4–9) after conception. In the groups of pregnancy exposed (n=64) and unexposed (n=85) to a DMARD at conception were the outcomes as follows: 36 and 64 live births, 16 and 6 elective pregnancy terminations, 8 and 12 spontaneous abortions, 2 and 0 extra-uterine gravidity, and 0 and 1 stillbirth, respectively. Among the 100 pregnancies with live births, most frequent complications were gestational diabetes in 9 cases and bleeding in 7 cases. Three women suffered from preeclampsia. Twelve children were born before the 37th week of gestation (5 (13.9%) of exposed and 7 (10.9%) of unexposed mothers) and 38 were born by Caesarean section. Six children were born with malformations, of which four are to be considered as major anomalies according to the EUROCAT classification¹ (2 (5.5%) in exposed patients and 2 (3.1%) in unexposed patients).

Of the 34 pregnancies in partners of male patients, in 26 cases the expectant fathers had been exposed to DMARDs at conception. Most pregnancies (29/34, 85.2%) resulted in a live birth, 3 (8.8%) ended in a spontaneous abortion and 1 (2.9%) pregnancy was terminated. Two (6.9%) children were born with congenital malformation

Conclusions: Women and men with JIA who are still undergoing treatment in young adulthood often become pregnant or procreate children under medication, why more information on drug safety in pregnancy is needed. For this, more patient data must be evaluated in connexion with therapy, disease activity and the JIA category.

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Opening plenary abstract session

OP0014

SERUM URATE, GOUT, AND CARDIOVASCULAR DISEASE IN A RANDOMISED CONTROLLED TRIAL OF CANAKINUMAB: A CANTOS SECONDARY ANALYSIS

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Background: Serum urate is a risk marker for both gout and cardiovascular disease, but trial data demonstrating that drugs which reduce gout also reduce cardiovascular event rates is scarce. It is also uncertain if any such effects are mediated through urate levels.

Objectives: We examined the relationships between serum urate (SUA), canakinumab, and incidence rates for gout and cardiovascular events in the Canakinumab Anti-inflammatory Thrombosis Outcomes Study (CANTOS), a randomised double-blind placebo controlled trial of IL-1 β inhibition.

Methods: 10 061 patients with stable atherosclerosis (prior myocardial infarction) and hsCRP ≥ 2 mg/L were randomly allocated to placebo or to one of three doses of canakinumab (50 mg, 150 mg, or 300 mg), administered subcutaneously once every three months. Serum urate and hsCRP were tested at baseline and every 3 months for the first year and then annually. A physician diagnosed history of gout was ascertained at baseline and subsequent attacks were assessed during follow-up as part of the systematic adverse event reporting. The rates of gout and major adverse cardiovascular events (myocardial infarction, stroke, re-vascularisation, and cardiovascular death) were compared across different baseline SUA levels and by randomised treatment assignment.

Results: The groups were well balanced with respect to baseline characteristics with a median follow-up of 3.7 years. Median age was 61 years, 74% were male, median BMI was 29.8kg/m², and median SUA at baseline was 6.1 mg/dl (IQR: 5.2, 7.2). In the placebo group, rates for both gout and major adverse cardiovascular events increased across baseline SUA strata. Rates were 0.28, 1.36, and 5.94 per 100 person years for gout and 4.1, 5.3, and 5.6 for major adverse cardiovascular events per 100 person years for SUA levels of <6.9 , 6.9–8.9, and ≥ 9.0 mg/dL, respectively. Random allocation to all dosages of canakinumab reduced rates of incident gout (see figure 1). This reduction in gout by canakinumab was observed at all baseline SUA levels (see table 1), and canakinumab had no effect on SUA levels over time but did reduce hsCRP.

Abstract OP0014 – Table 1. Gout risk by treatment assignment, stratified by baseline serum urate

		Placebo		Canakinumab (all dosages)				
		N	Events	Rate (95% CI)	N	Events	Rate (95% CI)	HR (95% CI)
Gout events								
SUA	<6.9 mg/ dl	2326	24	0.28 (0.18– 0.41)	4614	19	0.11 (0.07– 0.17)	0.40 (0.22– 0.73)
	6.9– 8.9 mg/dl	831	41	1.36 (1.00– 1.85)	1684	41	0.65 (0.48– 0.89)	0.48 (0.31– 0.74)
	≥9 mg/dl	186	34	5.94 (4.25– 8.32)	418	36	2.55 (1.84– 3.54)	0.45 (0.28– 0.72)

SUA, serum urate; Rate per 100 person-years; HR, hazard ratio; CI, confidence interval. Hazard ratios calculated using placebo as reference.