longer disease duration (0.96; 0.94, 0.98) and worse HAQ (0.74; 0.60, 0.92). Social functioning improved with better VASQOL (8.62; 3.32, 13.91), but worsened with more comorbidities (−0.92; −1.49, −0.35), anxiety or antidepressant use (−5.53; −7.68, −2.98), worse RADAI (−1.54; −2.80, −0.28), HAQ (−8.38; −10.31, −6.23) and fatigue (−1.16; −1.48, −0.86). Furthermore, the mechanism by which RADAI and HAQ social functioning did not appear to be through pain (0.20; −0.43, 0.84), but through HAQ as it absorbed 56% of the explanatory power of RADAI. CONCLUSIONS: Performance of social roles was limited among RA patients with more HAQ disability, and improved by better quality of life. Disease activity appeared to influence social functioning through worse physical disability but not through pain.

PM578
WORSE 6-MONTH BASELINE HAQ AND THE SELF-REPORTED RHEUMATOID ARTHRITIS DISEASE ACTIVITY INDEX PREDICT IMPROVEMENT IN THEIR SCORES 6 MONTHS LATER, AMONG RHEUMATOID ARTHRITIS PATIENTS
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BACKGROUND: Disease activity and disability should be assessed at each rheumatoid arthritis (RA) patient visit to monitor response to therapy. Disease activity has been traditionally evaluated by the disease activity scale (DAS-28) and the ACR criteria, which depend on physicians, but few studies have analyzed short-term predictors of RA patients' response. RA disease activity is routinely assessed by the health assessment questionnaire (HAQ) whose long term predictors, but not short-term, have been extensively studied. OBJECTIVES: To analyze whether the 6-month baseline levels of HAQ and of RADAI and other factors predict change at 6-months. METHODS: PA patients from the biannual NRd-Portugal cohort were used. For each patient, differences between two consecutive 6-month intervals were computed for HAQ (0–3, 3 is worse) and RADAI (0–10, 10 is worse). For each scale, a binary outcome was constructed based upon these differences, where a positive increment meant worsening in function and disability. Patients' variables whose increments were null were excluded. Univariate (U) and multivariate (MV) generalized estimating equations were used. Factors included age, sex, marital status, disease duration, education level, number of major comorbidities, paid work status and 6-month baseline HAQ and RADAI levels. RESULTS: MV analyses revealed that the main predictors of HAQ were baseline HAQ: OR: 0.49, 95% CI 0.44, 0.54, number of comorbidities (1.09 (1.05, 1.14), and age (1.02 (1.01, 1.02)); For RADAI they were, baseline RADAI (0.69 (0.66, 0.73)), comorbidities (1.11 (1.07, 1.16)), and educational level (0.95 (0.93, 0.97)). CONCLUSIONS: Worse baseline levels of HAQ and RADAI predicted their respective improvement 6-months later. This could be due to optimization of treatment strategies when worse baseline scores are detected, but whatever the reason, performing these two patient reported outcomes are a quick and non-rheumatologist dependent way to improve patients' disease status over 6-month intervals.

PM579
USE OF PATIENT-REPORTED OUTCOMES IN ON-LINE COMMUNITIES TO CONDUCT OBSERVATIONAL COMPARATIVE EFFECTIVENESS RESEARCH: A PILOT STUDY IN RHEUMATOID ARTHRITIS
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OBJECTIVES: The demand for comparative effectiveness research (CER) data from payers, physicians, and patients is significant, but the cost and time associated with prospective randomized trials is a barrier to rapid decision-making. Use of patient-reported outcomes (PROs) collected via on-line patient communities provides one channel for rapid data collection, particularly in conditions such as rheumatoid arthritis (RA), where validated PRO instruments are available. METHODS: A random sample of iGuard.org members in the US treated with non-steroidal anti-inflammatory drug (NSAIDs), oral disease-modifying antirheumatic drugs (DMARDs), or biologics for RA completed the Rheumatoid Arthritis Disease Activity Index (RADAI) and a series of other questions related to their disease. iGuard.org is a free medication monitoring service that is intended to patients through multiple sources including physician, pharmacy and online referrals. For this study, we report pilot baseline data on patient-reported RADAI, pain, and joint counts across 33 on-line treatment groups to demonstrate use of on-line communities in supporting CER. RESULTS: A total of 153 RA patients completed the study: 49 treated with NSAIDs only, 51 exposed to oral DMARDs, and 53 exposed to biologics. The mean (SD) RADAI score was 4.59 (2.16). Adjusting for age and gender and multiple comparisons, there were significant differences between the three treatment groups on RADAI scores (p = 0.0045) and patient global assessment of pain (p = 0.0357) but not on the number of painful joints (p = 0.3512). The trend was towards patients on NSAIDs only having worse outcomes compared to those on oral biologics or oral DMARDs. CONCLUSIONS: This pilot study demonstrates the possibility of collecting baseline disease severity data directly from patients using the RADAI, which is sensitive to detect differences by treatment on-line communities. The next step in the pilot program will be to investigate the potential for capturing longitudinal disease progression information amongst patients in on-line communities.

PRS1
RESPIRATORY-RELATED DISORDERS – Clinical Outcomes Studies

PRS2
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OBJECTIVES: Palivizumab is used to prevent severe respiratory syncytial virus (RSV) prophylaxis in high risk children. Data on seasonality, risk factors, and outcomes are necessary to evaluate the impact of palivizumab on the incidence of RSV infections, minimize health care resources and identify which infant sub-sets are receiving prophylaxis. To determine current usage of palivizumab prophylaxis, compliance with utilization, and outcomes related to respiratory illness (RI) events and hospitalization. Parents/caregivers were contacted monthly for data on palivizumab utilization, compliance, and outcomes related to respiratory illness (RI) events were collected monthly. Premature infants ≤35 completed weeks gestational age without medical conditions who met standard approval criteria for palivizumab (Group 1) were compared to those with underlying medical disorders who received prophylaxis (Group 2). RESULTS: Group 1 (n = 3379) Group 2 (n = 489). Male: 56.8% versus 54.6% (P = 0.043). Average Enrollment Age (months) ± SD: 3.6 ± 3.4 versus 9.9 ± 8.8 (P = 0.000). Average GA (weeks) Mean ± SD: 31.0 ± 3.1 versus 37.1 ± 4.3 (P = 0.000). Average # injections ± SD: 3.5 ± 1.5 versus 3.7 ± 1.5 (P = 0.000). Average # weeks spanned: 39 ± 17 months versus 40 ± 16 months (P = 0.000). Average GA (weeks) Mean ± SD: 31.0 ± 3.1 versus 37.1 ± 4.3 (P = 0.000). Average # weeks spanned: 39 ± 17 months versus 40 ± 16 months (P = 0.000).

PRS3
COMORBIDITY PROFILING OF COPD PATIENTS IN THE UNITED KINGDOM PRIMARY CARE USING AN INCIDENCE BASED APPROACH TO DETECT ASSOCIATIONS WITH THE DISEASE
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OBJECTIVES: Comorbidity is an important factor in any comparative assessment of treatments associated with morbidity and mortality of patients. Many factor such as age, gender and duration of a disease can influence the impact of comorbid diseases on quality of life. In the health care setting (the primary source of data for most observational studies), the decision to give a particular treatment to a particular patient with a given disease is generally based on patient specific characteristics, the most important of which is disease condition. Thus, confounding by indication/disease