longer disease duration (0.96; 0.94, 0.98) and worse HAQ (0.74; 0.60, 0.92). Social function improved with better VASQOL (8.62; 3.32, 13.91), but worsened with more comorbidities (<0.92; -1.49, -0.35), anxiolytic and/or antidepressant use (<5.33; -7.68, -2.98), worse RADAI (<1.54; -2.80, -0.28), HAQ (<3.8; -3.51, -6.23) and fatigue (<1.90; -1.48, -0.63). 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.

PMST8

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
Vasconcelos J1, Pedro S1, Marques R1, Chaves I1, Rodrigues A1, Michaud K2, Wolfe F1, Garcia E1

1. The University of Nebraska Medical Center, Omaha, NE, USA; 2. National Databases for Rheumatic Diseases, Wichita, KS, USA.

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 disease activity. The self- reported RA disease activity index (S-DAI) Disability 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: RA patients from the biannual NDB-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 disease activity. Patients’ observations whose increments were null were excluded. Univariate (UI) 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.

PMST9

USE OF PATIENT-REPORTED OUTCOMES IN ON-LINE COMMUNITIES TO CONDUCT OBSERVATIONAL COMPARATIVE EFFECTIVENESS RESEARCH: A PILOT STUDY IN RHEUMATOID ARTHRITIS
Cascada E1, Bharam M2

1. Guard Flex, Inc., USA; 2. Quintiles, Rockville, MD, USA.

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 153 RA patients, enrolled in the Guard Flex® online community, completed the Rheumatoid Arthritis Disease Activity Index (RADAI) and a series of other questions related to their disease. Guard Flex® 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 the three 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 patients on 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 quality of life. The next step in the pilot program will be to investigate the potential for capturing longitudinal disease progress information amongst patients on on-line communities.

PR51

RESPIRATORY-SYNCTIAL VIRUS PROPHYLAXIS IN SPECIAL POPULATIONS
Pass BA1, Li A1, Lanctot KL2, Mitchell IF1

1. McMaster University, Hamilton, ON, Canada; 2. Sunnybrook Health Sciences Centre, Toronto, ON, Canada; 3. University of Calgary, Calgary, AB, Canada.

OBJECTIVES: To examine the pattern of palivizumab utilization and compliance in infants with pre-existing disease within the Canadian Registry Database (CARESS).

METHODS: A prospective, registry of infants across 27 sites who received at least 1 dose of palivizumab during the 2006–2009 RSV seasons. Neonatal and demographic data were collected from the patient/caregiver at enrollment. 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). A total of 153 RA completed the Rheumatoid Arthritis Disease Activity Index (RADAI) and a series of other questions related to any respiratory tract events. Current usage of palivizumab prophylaxis, compliance patterns, hospitalization rate (HR) and outcomes in children at high-risk of respiratory syncytial virus (RSV) infection through a Canadian Registry Database (CARESS). RESULTS: 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 imply that infants with underlying medical disorders that are not approved for prophylaxis by advisory bodies and current position statements are at greater risk for RSV infections and hospitalization.

PR52

Pass BA1, Li A1, Lanctot KL2, Mitchell IF1

1. McMaster University, Hamilton, ON, Canada; 2. Sunnybrook Health Sciences Centre, Toronto, ON, Canada; 3. University of Calgary, Calgary, AB, Canada.

OBJECTIVES: Palivizumab is used to prevent 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 patterns, hospitalization rate (HR) and outcomes in children at high-risk of respiratory syncytial virus (RSV) infection through a Canadian Registry Database (CARESS).

METHODS: A prospective, study of infants who received at least 1 dose of palivizumab in the 2006–2009 RSV seasons across 27 sites. Neonatal and demographic data were collected from the patient/caregiver at enrollment. Parents/caregivers were contacted monthly for data on palivizumab utilization, compliance and outcomes related to any respiratory tract events. RESULTS: A total of 4926 infants aged 2 days–47 months (mean ± 5.4 months) were enrolled. Participants were typically male (57.1%) and Caucasian (70.8%). Gestational age (GA) was 32.2 ± 4.6 completed weeks. 3480 (70.6%) premature infants received palivizumab ≤35 completed weeks GA), 403 (8.2%) required O2, 471 (9.6%) had congenital heart disease and 372 (11.6%) were prophylaxed for other risk factors. On average patients received 3.7 ± 1.5 injections, with 17,982 doses given overall. There were no drug related serious adverse events.296 infants required 357 hospitalizations for respiratory tract infections with a hospitalization rate of 6.0%. There were significant differences between indications for palivizumab (chi-square = 71.8, P < 0.005). The overall RSV positive HR was 1.38. Hospitalization rates were higher in infants of aboriginal descent (15.0%, chi-square = 22.2, P < 0.005). Hospitalized infants had a lower percentage of compliant injections (62.8% versus 68.6%, P = 0.003). CONCLUSIONS: The RSV HR in the 2006–2009 RSV seasons resembled several published reports (range 1.3%–5.3%). RSV HR may be decreasing because of compliance with palivizumab prophylaxis, variability in RSV epidemiology, hospital admission criteria and preventive education.

PR53

COMORBIDITY PROFILING OF COPD PATIENTS IN THE UNITED KINGDOM PRIMARY CARE USING AN INCIDENCE BASED APPROACH TO DETECT ASSOCIATIONS WITH THE DISEASE
Kiri VA1,2,3

1. University of Nebraska Medical Center, Omaha, NE, USA; 2. University of Nebraska Medical Center, Omaha, NE, USA; 3. University of Nebraska Medical Center, Omaha, NE, USA.

OBJECTIVES: Comorbidity is an important factor in any comparative assessment of treatments associated with morbidity and mortality of patients. Many factors 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