OBJECTIVES: Biologic treatments for rheumatoid arthritis (RA) vary widely in both the time required to administer treatment and treatment frequency. The primary aim of this study is to quantify the tradeoffs RA patients are willing to make between the time and frequency. Methods: Patients with a self-reported physician diagnosis of moderate-to-severe RA completed a Web-enabled conjoint-analysis survey. Severity of self-reported symptoms was determined by the Routine Assessment of Patient Index Data 3 (RAPID-3) score. Patients were presented with three choice questions. Each hypothetical treatment included six attributes: response rate, mode of administration, treatment time, treatment frequency, and the risks of immediate, mild, and serious treatment reactions. Preference weights were estimated using mixed-logit and were used to calculate the relative importance of treatment attributes and the marginal rate of substitution between treatment time and frequency (MRS). Results: A total of 901 patients completed the survey. The risk of serious treatment reaction was the most important attribute followed by the frequency of treatments and treatment response rate, which were equally important. The risk of a mild treatment reaction was the least important attribute. The MRS implies that if the duration of a 4-h infusion administered 4 times per year were reduced to 2 hours: 1) the frequency would have to be 10.4 times per year to keep utility constant; 2) the frequency of a 4-hour infusion administered 4 times per year would have to be reduced to 1.6 times per year to keep utility constant; and 3) there would have to be a 10% increase in predicted probability of choosing the treatment if all other attributes of this and other RA treatments were unchanged. Conclusions: Convenience of RA treatment is important to RA patients. Treatment duration and frequency likely play an important role in patients' choice of RA treatment.

PMS45 PARENTS' WILLINGNESS-TO-PAY FOR BIOLOGIC TREATMENTS IN JUVENILE IDIOPATHIC ARTHRITIS

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OBJECTIVES: The availability of biologic therapies has increased the complexity of treatment decisions in juvenile idiopathic arthritis (JIA). There are important differences in the effectiveness, safety, convenience and cost of these treatments compared to other therapeutics. RAJ is a disease with a disease course that includes periods of restricted public funding and funding also limit access to biologics in JIA. The objective of this research was to determine parents’ willingness-to-pay (WTP) for attributes related to drug treatments in JIA and for profiles reflecting methotrexate (MTX) and etanercept (ETN). Methods: WTP was determined using parameter estimates from a discrete choice experiment (DCE). WTP was estimated as the ratio of an attribute divided by the negative of the cost attribute. Average WTP for MTX and ETN profiles were estimated using expected compensating variation. Bootstrapping was used to generate 95% confidence intervals for all WTP estimates. Results: Parents had the highest WTP for improved participation in daily activities and pain relief followed by the elimination of treatment side-effects. Parents were willing to pay $3,403 (95% CI $3,294-$3,512) for MTX compared to placebo. However, WTPs for ETN were not statistically different from placebo. Conclusions: Parents’ WTP represents a monetary equivalence of utility for drug treatments in JIA and their desire for treatments that reduced pain, improved daily function and decreased joint counts. These findings are consistent with recent guidelines which recommend more aggressive therapies for children with JIA. Unfortunately, high costs and limited access to biologic drugs in Canada presents challenges for patients receiving the most effective treatment. Findings from this study will be used to inform policy decisions surrounding the future of prescription drug programs for JIA and other chronic pediatric conditions.
improvement from baseline to week 26, in 7 of 8 SF-36 domains, versus non-responders, and 2 to 8 times greater improvement in HAQ. Patients attaining low disease activity (Sub-group C) experienced the greatest differences. For Sub-group B, where cohorts had the most comparable baseline scores, results were statistically significant for HAQ (p=0.0012) and 6 of 8 SF-36 domains (p=0.01 except role-emotional and mental health domains). CONCLUSIONS: Patents able to attain T2T-remission and who responded showed significantly greater absolute improvement in health status versus non-responders, in HAQ and 6 of 8 SF-36 domains. There may be additional value in adding change scores to threshold values in current T2T objectives for severe patients and consideration of patient functionality may be warranted.

PMS51

SHARED DECISION MAKING BETWEEN PATIENTS AND PHYSICIANS IN THE CHOICE TO INITIATE BIOLOGIC THERAPY FOR TREATMENT OF RHEUMATOID ARTHRITIS

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OBJECTIVES: To describe the shared decision-making process between patients and physicians when initiating biologic therapy for the treatment of rheumatoid arthritis (RA) from the patient perspective. METHODS: Patients self-reporting a diagnosis of RA completed a self-administered, internet-based questionnaire in the Fall of 2011. A subset of patients currently using a biologic therapy to treat their RA provided details about the decision-making process for initiating their current therapy. RESULTS: A total of 2138 respondents (76% female, mean age 56.4) completed the questionnaire. Of these, 20% (n=427) reported taking biologic therapy. Discussions about biologic therapy were most often initiated by a rheumatologist (91%), only a small proportion of patients reported that a primary care physician (4%), the patient themselves (3%), or another (2%) initiated the discussion. During the discussions, physicians most often focused on administration of therapy (57%), and importance of concomitant methotrexate use (53%). Patients rated the following as very or extremely influential (4 or 5 on a 5-point Likert scale) in the final decision to initiate biologic therapy: advice or recommendation by physician (76%), co-pay assistance to cover out-of-pocket costs (11%), advice or recommendation from other healthcare professional (28%), patient literature materials from physician office (27%), and information from general websites (22%). Most (77%) reported making the decision to start biologic therapy at the time of the initial discussion with their physician; mean time for all patients to make a decision to start biologic therapy was 12.2 days from the time of initial discussion. CONCLUSIONS: Rheumatologists are best positioned to ensure that patients receive the necessary information to actively engage in the shared decision-making process for initiating biologic therapy. Future research should focus on potential outcomes benefits of shared decision-making.

PMS52

VALIDATION OF REMISSION OF RHEUMATOID ARTHRITIS BY TRADITIONAL MATERIALS FROM PHYSICIAN OFFICE (27%), AND INFORMATION FROM GENERAL WEBSITES (22%), AND CURRENT RECOMMENDATION FROM OTHER HEALTHCARE PROFESSIONAL (28%), PATIENT LITERATURE MATERIALS FROM PHYSICIAN OFFICE (4%), THE PATIENT THEMSELVES (3%), OR ANOTHER (2%) INITIATED THE DISCUSSION. DURING THE DISCUSSIONS, PHYSICIANS MOST OFTEN FOCUSED ON ADMINISTRATION OF THERAPY (57%), AND IMPORTANCE OF CONCOMITANT METHOTREXATE USE (53%). PATIENTS RATED THE FOLLOWING AS VERY OR EXTREMELY INFLUENTIAL (4 OR 5 ON A 5-POINT LIKER SCALE) IN THE FINAL DECISION TO INITiate BIOLOGIC THERAPY: ADVICE OR RECOMMENDATION BY PHYSICIAN (76%), CO-PAY ASSISTANCE TO COVER OUT-OF-POCKET COSTS (11%), ADVICE OR RECOMMENDATION FROM OTHER HEALTHCARE PROFESSIONAL (28%), PATIENT LITERATURE MATERIALS FROM PHYSICIAN OFFICE (27%), AND INFORMATION FROM GENERAL WEBSITES (22%). MOST (77%) REPORTED MAKING THE DECISION TO START BIOLOGIC THERAPY AT THE TIME OF THE INITIAL DISCUSSION WITH THEIR PHYSICIAN; MEAN TIME FOR ALL PATIENTS TO MAKE A DECISION TO START BIOLOGIC THERAPY WAS 12.2 DAYS FROM THE TIME OF INITIAL DISCUSSION. CONCLUSIONS: RHEUMATOLOGISTS ARE BEST POSITIONED TO ENSURE THAT PATIENTS RECEIVE THE NECESSARY INFORMATION TO ACTIVELY ENGAGE IN THE SHARED DECISION-MAKING PROCESS FOR INITIATING BILOGIC THERAPY. FUTURE RESEARCH SHOULD FOCUS ON POTENTIAL OUTCOMES BENEFITS OF SHARED DECISION-MAKING.

PMS53

USING SCATTER PLOTS, ANALYSIS OF UNIVARIATE RELATIONSHIP BETWEEN CONFOUNDERS AND OUTCOMES AMONG RHEUMATOID ARTHRITIS PATIENTS WHO INITIATED ANTI-TUMOR NECROSIS FACTORS AND SUBSEQUENTLY SWITCHED OR ESCALATED

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OBJECTIVES: To examine the relationship of health care costs with baseline demographic and clinical characteristics for rheumatoid arthritis (RA) patients. METHODS: Adult RA patients (ICD-9: 714.10) treated with anti-tumor necrosis factors (anti-TNFs) were identified from a large US commercial claims database (Fenestra, 2009). Outcomes included total health care costs, and the results were similar. CONCLUSIONS: There were strong positive relationships between baseline and follow-up health care costs among RA patients who initiated anti-TNFs and subsequently switched to another drug or escalated their dosage. The positive relationships between CCI and CDS were more prominent in the commercially-insured patient population.

PMS54

ROUTINE ELECTRONIC PATIENT REPORTED OUTCOME (ePRO) DATA COLLECTED IN AN ORTHOPEDIC PATIENT CLINIC: WHAT IS USED TO ENSURE PROPER MIGRATION OF THE PRO MEASURE AND BENEFITS TO THE CARE PATHWAY

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OBJECTIVES: To develop and test an ePRO system for routine collection of surgical outcomes in a busy orthopedic clinic. METHODS: We developed an ePRO (iPad) version of the widely adopted Oxford Knee (OKS) and Shoulder (OSS) scores. A multi-stage process was used to ensure each ePRO version equivalence involving the PRO instrument developer, PRO manager, PRO translation specialists as well as surgeons and Electronic Management Record (EMR) hospital specialists. This included, a review of the draft ePRO version, pilot-testing (cognitive debriefing and usability testing) on five patients attending an outpatient clinic to ensure that obtained results reflect clinical usage and not the specific condition to which ePRO. RESULTS: The ePRO version of both questionnaires were shown, from pilot-testing, to be easy to use. Compared with OKS and OSS paper versions, ePRO responses were all legible (an issue for some Rheumatoid patients) and complete. ePRO completion also takes care of data entry, resulting in a dataset free of errors that might otherwise arise. This suggested the potential for higher return rates with reduced handling costs. Following review of pilot-testing, no significant issues were identified, so the final ePRO versions were adopted. Secure synchronisation of the completed ePRO results with the local EMR system proved straightforward, required little data cleaning and provided almost immediate feedback to clinicians. CONCLUSIONS: Initial results demonstrated the OKS and OSS have been successfully migrated to the ePRO (iPad) version, with results from pilot-testing indicating that the ePRO version is a robust tool that will capture information currently obtained from paper versions. ePRO completion enters scores instantaneously on the local EMR system and as a result routine collection of a high volume of PROs could be achieved efficiently. This development facilitates the collection of PRO measure data within the clinic environment, highlighting their potential to enhance patient-centred care across the patients care pathway.

PMS55

QUALITY OF LIFE AMONG PATIENTS WITH SELF-REPORTED RHEUMATOID ARTHRITIS: A NATIONALLY REPRESENTATIVE SAMPLE

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OBJECTIVES: To examine the relationship between patients who self-reported Rheumatoid Arthritis to statistically matched patients without Rheumatoid Arthritis. METHODS: The study utilized a cross-sectional population-based design, in which respondents representing non-institutionalized adults in the United States of ages 18 or above, were chosen from the 2006 Medical Expenditure Panel Survey (MEPS). Respondents were included in the self-reported Rheumatoid Arthritis definition. CONCLUSIONS: While disease remission has been adopted as a target in the management of RA, more stringent remission criteria proposed by ACR/EULAR can provide optimal patient-reported outcomes.