OBJECTIVES: An 11-point pain scale from 0 (No Pain) to 10 (Worst Possible Pain) is a frequent outcome measure in pain studies. The measure is easily administered, understandable and useful in many diseases in which pain is a factor. However, results from pain scales are difficult to compare with results from alternative outcome measures when making policy decisions across diseases. Our objective was to examine the relation between an 11-point pain scale and preferences and evaluate the performance of the scale in estimating preferences. Thereby, possibly providing a method to estimate preferences in studies including an 11-point pain scale but no direct preference measure.

METHODS: We used data from two clinical trials of patients with chronic low back pain (N = 382). Patients were divided into an estimation (N = 287) and validation (N = 95) sample. At follow-up visits, patients completed an 11-point pain scale and the EuroQol (EQ-5D). Results: In the overall cohort, average preference values in four categories of pain were 0.843 (SD = 0.201) for No Pain, 0.626 (SD = 0.226) for Mild, 0.492 (SD = 0.282) for Moderate and 0.245 (SD = 0.314) for Severe. A regression model from the estimation sample provided preference estimates for Mild pain of 0.628 and differences from that value were 0.172 for No Pain, −0.135 for Moderate pain, and −0.387 for Severe pain. When these values were applied to the validation sample, absolute differences between actual and predicted preferences for the pain categories ranged from 0.003 to 0.129. Generally, the prediction methods did reasonably well at predicting group averages, however the methods did not accurately predict individual preferences. CONCLUSIONS: Our findings provide investigators a reasonable method for estimating preferences in studies including an 11-point pain scale but no preference measure. However, the properties of these estimates need to be evaluated in other patient populations and are only a second-best alternative for determining preferences.

OBJECTIVES: To assess the validity of patient preference assessments of short-term health states associated with endometriosis pain treatments; and to compare individual treatment recommendations generated by a decision-analytic model incorporating patients’ rating scale (RS) versus modified time tradeoff (mTTO) values.

METHODS: Seventy patients with endometriosis pain valued nine health states associated with 3 equally-effective treatments with different side effect profiles (danazol, GnRH agonist, laparoscopy), using RS and mTTO with sleep as the trading metaphor. With mTTO, subjects chose between spending the next month in each health state versus spending X days “asleep” (an unrestful period of time one would miss) and 30-X days in good health with no symptoms. We examined the internal and across-method consistency of the valuations by checking for violations of logical adherence (valuing states with increasing adverse effects progressively worse) and procedural invariance (consistent rank ordering of states across assessment methods). Finally, we incorporated individual patients’ valuations into a decision-analytic model and assessed the concordance of treatment recommendations based on mTTO and RS values (converted into utilities with a power transformation). RESULTS: Mean mTTO values in order of increasing side effects were: danazol −0.96, 0.80, 0.58, 0.47; GnRH agonist −0.97, 0.78, 0.59; laparoscopy −0.77, 0.48. The vast majority of subjects (97% with RS; 99% with mTTO) consistently valued states with increasing morbidity progressively worse; and 97% valued each treatment’s health states in a consistent rank order with RS and mTTO. Based on mTTO valuations, individual treatment recommendations were: 42% laparoscopy, 38% danazol, and 20% GnRH agonist. However, recommendations based on transformed RS values differed for 49% of subjects.

CONCLUSIONS: Both RS and mTTO demonstrated internal and across-method consistency in assessing the temporary health states associated with endometriosis treatments. However, the choice of assessment method can greatly affect decision-analytically derived treatment recommendations made to individual patients.

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PMP34

PATIENT PREFERENCE-BASED TREATMENT RECOMMENDATIONS FOR ENDOMETRIOSIS PAIN: CHOICE OF METHOD MATTERS

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OBJECTIVES: Chronic pain is common in older patients. Data are presented from the University of Utah Pain Management Center (PMC) to compare HRQoL in older chronic pain patients with younger patients.

METHODS: Patients at the PMC are administered the TOPS (Total Outcome of Pain Scale), a pain enhanced SF-36 that is more sensitive and specific for chronic pain HRQoL out-
comes. It is a 60-item questionnaire that contains the SF-36 plus Pain Symptom, Functional Limitations, Perceived Family/Social Disability, Real Family/Social Disability and Formal Work Disability scales. **RESULTS:** Five thousand two hundred thirty-five TOPS instruments were completed from 1997 to 2002. Four thousand one hundred one were excluded. The remaining 2,368 were analyzed and will be presented. In this elderly population, consistent with published validation standards, SF-36 Physical Component Summary (PCS), Mental Component Summary (MCS) and the TOPS Total Pain Experience scales (TPE, a composite of 7 TOPS scales), for chronic pain patients <65, 65–74 and >75 are: PCS (29.6, 27.9, 26.4), MCS (39.7, 42.2, 42.9), and TPE (60, 58.8, 61.1). The PCS and MCS were significantly different (p < 0.05) when patients <65 were compared with older patients. Top 5 ICD9 diagnoses in each age group accounted for 52–60% of diagnoses reported, with myalgia and myositis (729.1) and lumbago (724.2) being first and second ranked in each age group. Neuralgia, neuritis and radiculitis incidence was in the top five reported ICD9 diagnoses for both older age groups, while herpes zoster complications was reported only in the 75+ age group. Influence of gender and work disability were also analyzed and will be presented. **CONCLUSIONS:** Older chronic pain patients have a higher PCS, lower MCS, similar TPE, and different diagnoses, as compared with younger patients.

**URINARY & KIDNEY DISEASES/DISORDERS—Clinical Outcomes/Healthcare Policy**

**COMPARISON OF DIRECT HEALTH-CARE COST, HOSPITAL UTILIZATION AND MEDICATION PERSISTENCE BETWEEN EXTENDED RELEASE FORMS (ER) OF TOLTERODINE AND OXYBUTYVIN IN OVERACTIVE BLADDER/URINARY INCONINENCE PATIENTS**

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**OBJECTIVES:** Tolterodine-ER is a newly-released medication for Overactive Bladder/Urinary Incontinence (OAB/UI). This retrospective study investigated the difference in direct health-care cost, hospital utilization, and medication persistence between OAB/UI patients initiated with tolterodine-ER or oxybutynin-ER. **METHODS:** Newly started adult patients (age > 18) on either tolterodine-ER or oxybutynin-ER from October 2001 to May 2002 with 1-year washout period, were included and followed up until the end of study period or disenrollment. The log-transformed direct healthcare cost (excluding OAB-related pharmacy cost per member per month) was analyzed by ANCOVA. Control variables include demographics, previous hospital utilizations, medication pattern, prior OAB diagnosis and comorbidities. A Cox Proportional Hazard model was applied to examine the effect of different initial treatments on persistence described by time to switch and time to discontinuation. Logistic regression was used to assess the risk of hospitalization associated with the first prescription. **RESULTS:** Of 1811 patients, 1021 patients started with tolterodine-ER, and 790 with oxybutynin-ER. The average follow-up period for both groups was five months. No significant difference was found in the converted adjusted costs PMPM between tolterodine-ER group (US$602) and oxybutynin-ER group (US$648) with P = 0.324. Two groups had similar physician encounter frequency (one visit PMPM) and emergency room visit rate (2%), but tolterodine-ER initiated patients were less frequently hospitalized (9.11% vs. 13.16%, P = 0.006). A higher proportion of oxybutynin-ER initiated patients discontinued (56.6% vs. 52.5%, P = 0.08) and switched (7.85% vs. 7.54%, P = 0.808). The type of initial therapy did not significantly affect time to discontinuation or time to switch, but initiating tolterodine-ER could reduce the probability of hospitalization by 32% (OR: 0.677, P = 0.037). **CONCLUSIONS:** Initial drug selection did not significantly change direct healthcare cost, medical utilization, and medication persistence in OAB/UI patients. However, patients initiating with oxybutynin-ER were exposed to a higher risk of hospitalization than those initiating with tolterodine-ER.

**FACTORS ASSOCIATED WITH DIALYSIS TREATMENT COSTS AMONG MEDICARE ENROLEES**

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**OBJECTIVES:** Kidney failure affects approximately 300,000 people within the United States who require dialysis therapy. Health care for affected patients is mainly provided through the Medicare program. The literature has shown that kidney failure has a significant emotional, psychological and financial impact on affected patients and society. There could be several factors that determine patient utilization costs. Our objective is to identify the demographic, clinical, and treatment facility factors that significantly explain the costs associated with kidney failure treatment. **METHODS:** The study sample consisted of 47,285 Medicare eligible dialysis patients. Data were extracted for a 1-year period (1999). Predictor variables included patient demographics, treatment facility, and several other kidney related laboratory test values (such as creatinine clearance rates, co-morbidities, BUN, and hematocrit at baseline). Outcome variables included the dialysis treatment costs for epoetin and iron injec-