OBJECTIVES: Patient-reported outcome (PRO) measures provide patients and clinicians with a tool to assess physical, social, and psychological functioning. Individual and aggregated data can inform treatment decision making and aid patient management. Existing PRO measures for psoriasis typically do not fully capture either impact on emotional wellbeing or coping behaviors, including modifiable behaviors associated with poor health outcomes and comorbid disease. The aim of this study was to develop content for a new PRO for the clinical management of psoriasis. **METHODS:** Patients with chronic plaque psoriasis were identified and recruited through two psoriasis-specific clinics. Content was developed and iteratively refined through: a) in-depth qualitative, face-to-face interviews (n=30) using a semi-structured interview guide and analyzed using NVivo; b) development of a conceptual model and draft items with an expert panel; and c) cognitive debriefing of draft items, response scale, and recall period to determine understanding and relevance to patients (n=8). **RESULTS:** Qualitative analysis revealed seven main domains of concern to patients with psoriasis including symptoms and impact on negative wellbeing, positive wellbeing, daily activities, illness beliefs, treatment beliefs, and coping techniques. A conceptual model is presented, postulating relationships between concepts identified by patients. An initial bank of 97 items was developed; cognitive debriefing revealed that most items were deemed relevant to psoriasis experience and could be accurately recalled over a 14-day time period. Six items were deleted through redundancy, lack of relevance, or poor understanding. A 91-item bank across six sub-scales remained. **CONCLUSIONS:** The new measure, PROMPT, was derived from patient-reported experience and demonstrates initial face and content validity in a plaque psoriasis patient population. Further confirmation and refinement of items, scales, and scoring structure is planned through a large-scale quantitative study using Rasch techniques.

PSS36

CLIENT ACCEPTANCE TRIAL WITH INJECTABLE CEFOVECIN SODIUM IN DOGS AS A FIRST LINE OF TREATMENT FOR SUPERFICIAL PYODERMA, WOUNDS, AND ABSCESSES CAUSED BY SUSCEPTIBLE STRAINS OF STAPHLOCOCCUS INTERMEDIUS AND STREPTOCOCCUS CANIS GROUP G

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OBJECTIVES: Many veterinarians are hesitant to recommend cefovecin sodium for subcutaneous administration as a first treatment for superficial pyoderma in dogs because there is a perception that dog owners will not accept the cost compared to less expensive oral medications requiring repeated administration. The objective was to assess the impact of weight of the dog using a margin markup pricing method on the acceptance by dog owners of cefovecin sodium as a first line treatment in appropriate cases. **METHODS:** Thirty veterinarians in 22 different geographical veterinary practices that were members of CAPNA a group of veterinary hospitals owned by veterinarians in the US were asked to offer cefovecin sodium as a first line treatment for appropriate cases. The date of examination, weight of the dog and owner's acceptance or decline was recorded for a two month period. Owners were charged using the weight of the dog multiplied by 1.25 plus a $45 margin markup. **RESULTS:** Of the sample of 683 dogs, 76.28% (n=521) accepted cefovecin sodium as a single subcutaneous administration with an average weight of 32.57 lbs. and a range of 3-135 lbs. 23.7% (n=162) declined treatment with an average weight of 58.44 lbs. with a range of 10.20-155 lbs. The difference in weights of 25.87 lbs. was statistically significant (P< 0.0001). The average cost of the accepted cefovecin sodium injection for 32.57 lb dog is $85.71. The average cost of the declined cefovecin sodium injection is $118.05.The average cost of the alternative oral medications for cefpodoxime proxetil administered once daily is $29.96 and cephalexin administered twice daily is $5.04. **CONCLUSIONS:** The dog owners in this study accepted treatment with cefovecin sodium as a first line of therapy in 76.2% of the cases even though the cost of the onetime treatment was 3 to17 times more than oral alternatives.

PSS37

AVAILABILITY AND AFFORDABILITY OF ANTIGLAUCOMA DRUGS IN BENIN CITY, NIGERIA

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OBJECTIVES: To investigate the availability and affordability of antiglaucoma medicines in Benin City, Nigeria. **METHODS:** The study employed retrospective and prospective cross sectional design, using data collection forms, WHO/HAI data collection format for collection and analysis of medicine prices in public and private sectors. The name of the antiglaucoma drugs (branded and generic), usual quantities, price prescribed for a month supply to patients, strength, unit pack, brand name, lowest priced generic (LPG) were recorded. Physical sighting of product was done to confirm availability in that facility. Data was analyzed with WakAfford1.0. Medicine Affordability Calculator developed for this study based on USD103 (NGN17, 000) minimum wage per month for the least paid government worker **RESULTS:** Thirty-six antiglaucoma medicines were surveyed in the three main sectors. The branded products in private pharmacies had 47.22% availability, private clinics 38% and public hospital 25%, while the generic medicines had 25% in private pharmacy, 22.22% in clinics and 19.44% in public hospitals. The most affordable branded product in Private pharmacies was acetazolamide tablets (0.16 ± 0.02 days) and Timolol 0.5% eye drop (0.59 ± 0.04 days), while the most unaffordable product is Combigan® (brimonidine + timolol) (12.71 ± 0.17days). However timolol 0.25% was the most affordable in private clinic while Xalacomb® (latanoprost + timolol) was the most unaffordable **CONCLUSIONS:** The availability of antiglaucoma drugs in Benin City is suboptimal and some are unaffordable across the different sectors. Government and donor agencies should subsidize and make them accessible to patients. Acknowledgement: WakAfford 1.0 affordability calculator developed with BaseCase Interactive donated in an academic partnership by BaseCase (Berlin, Germany). Available at www.pub.basecase.com/BbduCjuzFD

SENSORY SYSTEMS DISORDERS – Health Care Use & Policy Studies

PSS38

A RETROSPECTIVE COHORT STUDY TO INVESTIGATE ACTUAL TREATMENT FOR GLAUCOMA USING A JAPANESE HEALTHCARE DATABASE

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OBJECTIVES: The risk of blindness from glaucoma can be reduced by early detection and treatment. A domestic large-scale surveillance (Tajimi Study) shows that approximately 90% of glaucoma patients of 40 years or older are undiagnosed, and initiation of the treatment is delayed. In this study the glaucoma treatment was investigated to understand the real-world situation of glaucoma therapy using claim data in Japan. **METHODS:** This was a retrospective cohort study. The data were extracted from a Japanese healthcare database (MinaCare Co., Ltd), which contained claim data obtained from approximately 2.0 million members of employment-based health insurance groups and their dependents. The ICD-10 classification was used to identify glaucoma patients. A washout period of 6 months before enrollment was set during which there were no records of prescriptions of antiglaucoma drugs or glaucoma surgery. Antiglaucoma ophthalmic solutions or surgery for initial treatment, persistence and change in medication were investigated. **RESULTS:** Out of 2,074,499 people in the database as of August 2014, we identified 42,470 glaucoma patients and the target group who met the wash-out conditions involved 6,333 patients (male: 3,618; female: 2,715). About 75% of the patients were between 40 to 69 years old and about 10% were 70 years or older. Regarding the initial treatment, most patients started with topical antiglaucoma treatment and only 24 patients underwent surgery. The first prescription of antiglaucoma drug included 1 agent in 87%, and cases with 2 agents (10%), 3 agents (3%), or more than 3 agents (0.3%) were also identified. The most prescribed one was latanoprost (26%) followed by tafluprost (17%), and carteolol (10%). **CONCLUSIONS:** In this study, the initial treatment in most of the patients followed the treatment guidelines. However, lack of disease awareness among potential patients and accessibility to early screening and diagnosis of glaucoma may exist, and it should be given sufficient consideration.

PSS39

ASSESSING THE IMPACT OF INCREASED MAINTENANCE DOSING OF ADALIMUMAB AND ETANERCEPT ON MANAGED CARE COSTS

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OBJECTIVES: Psoriasis (PSO) and psoriatic arthritis (PsA) are immune-mediated systemic inflammatory diseases; adalimumab (ADA) and etanercept (ETN) are among the most commonly used first-line biologic agents. As per FDA-approved dosage and administration, newly initiated PSO patients receive a higher loading dose followed by a regular maintenance dose. In clinical practice, however, patients may receive higher than recommended (increased) doses even during the maintenance phase of treatment. Given linear pricing of these medications, our objective was to determine if the increased dosing schedule increases payer costs and to what degree. **METHODS:** Continuously enrolled adult patients with ≥2 outpatient diagnoses of PSO (ICD-9 code: 696.1) or PsA (ICD-9 code: 696.0) were selected from the Symphony PTD Claims Database if their first biologic prescription date (index date) fell between May 2010 and April 2013. Patients were required to be treatment-naïve only to ADA or ETN pre-index. The cost analysis took place over 12 months post-index. Regular (increased) maintenance dosing was defined as ADA 40 mg (>40 mg) biweekly starting 1 week post-index and ETN 50 mg (>50 mg) weekly starting 3 months post-index. Costs were imputed based on 2015 wholesale acquisition costs: $36.4/mg of ADA and $14.9/mg of ETN. **RESULTS:** 15.0% of 21,234 ADA patients received increased maintenance doses for PSO and 18.0% of 8,908 for PsA. For ETN, the proportion was 31.9% of 16,318 for PSO and 17.0% of 7,647 for PsA. Average annual costs for patients receiving an increased vs. regular dose of ADA were: PSO: $40,042 vs. $27,319 (P<0.001), PSA: $43,949 vs. $26,570 (P<0.001). Average annual costs for patients receiving an increased vs. regular dose of ETN were: PSO: $46,148 vs. $30,289 (P<0.001), PSA: $43,816 vs. $30,653 (P<0.001). **CONCLUSIONS:** A large proportion of patients treated with commonly used biologic agents are maintained on increased maintenance doses, significantly increasing payer costs.

PSS40

UTILIZATION, PRICE, AND SPENDING TRENDS FOR FLUOROQUINOLONES IN THE US MEDICAID PROGRAM: 1991-2013

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OBJECTIVES: Fluoroquinolones are broad-spectrum antibiotics commonly used in the treatment of respiratory tract infections, uncomplicated urinary tract infections and gastrointestinal infections. This study described and analyzes trends in the utilization, spending, and average per-prescription cost of fluoroquinolones individually and overall, by the Medicaid programs from 1991 to 2013. **METHODS:** A retrospective, descriptive analysis was performed using the publicly available national Summary Files from the Medicaid State Drug Utilization Data maintained by the Centers for Medicare & Medicaid Service. Study drugs included ciprofloxacin, gemifloxacin, levofloxacin, moxifloxacin, norfloxacin, and ofloxacin, as well as recently withdrawn drugs, grepafloxacin (1999), sparfloxacin (2001), trovafloxacin (2001), and gatifloxacin (2006). Annual prescription counts and reimbursement amounts were calculated for all fluoroquinolones reimbursed by Medicaid. Average per-prescription spending as a proxy for drug price was calculated (estimated) for all generic and brand drugs by dividing reimbursement by the number of prescription. **RESULTS:** The total number of fluoroquinolone prescriptions rose 340% from 1.66 million in1991 to 5.65 million in 2005, and then decreased to 4.21 million in 2013. Total expenditures on fluoroquinolones increased from $81 million in 1991 to $395 million in 2004, and then decreased to $163 million in 2013. The average pre-prescription price for generic ciprofloxacin was $7.76 in 2013, whereas the price

per-prescription of branded (Cipro) ciprofloxacin was $149.34. The sharp decrease in the utilization of Trovan can be explained by the withdrawal from the market in 2001 because of risk of liver failure. **CONCLUSIONS:** Increased expenditures for fluoroquinolones paralleled with increased utilization. Generic drug utilization increased dramatically after brand-name patent expiration. Fluoroquinolone drug utilization might be also associated with its safety profile and related disease treatment guidelines.

PSS41

ASSOCIATION OF OBESITY WITH 30-DAY READMISSION RATES AMONG PATIENTS HOSPITALIZED WITH ACUTE BACTERIAL SKIN AND SKIN-STRUCTURE INFECTIONS (ABSSSI)

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OBJECTIVES: Obesity is associated with increased risk of soft tissue infection and clinical failure; however, the association between obesity and longer-term clinical outcomes in ABSSSI patients is not well-studied. This study compared hospital readmission rates between obese and non-obese ABSSSI patients. **METHODS:** Adults (>18 years) hospitalized with ≥1 primary ABSSSI diagnosis were selected from the Cerner HealthFacts electronic medical records database (2009-2013). The first primary ABSSSI inpatient admission was defined as the index admission. Patients were categorized into obese (BMI>30) and non-obese cohorts at the index admission. Proportions of patients with all-cause and ABSSSI-related readmission to the same hospital within 30 days were compared between the cohorts descriptively (in subgroups defined by gender, age, and causative pathogen) and using multivariable logistic regression adjusting for hospital size, demographics, insurance type, causative pathogen, and important comorbidities. **RESULTS:** 5,823 obese and 5,882 non-obese patients were identified. Fewer obese patients were male (47.8% vs 55.8%), ≥65 years old (28.2% vs 34.3%), and admitted to teaching hospitals (70.7% vs 73.4%). Same-hospital 30-day readmission rates were higher for obese patients for both all-cause (12.9% vs 11.8%, p=0.085) and ABSSSI-related (5.3% vs 4.0% p=0.0019) readmissions. ABSSSI-related readmission rates remained significantly higher for obese patients among males (5.1% vs 3.8%, p=0.0086), younger patients (age <65 years, 5.0% vs 3.6%, p=0.0026), and those not infected with methicillin-resistant staphylococcus aureus (5.3% vs 4.2%, p=0.0049). In multivariable regressions, obese patients had higher odds of 30-day readmission for all-cause readmissions (obese vs non-obese: OR=1.10, p=0.0944) and significantly higher odds of ABSSSI-related readmissions (OR=1.28, p=0.0073). **CONCLUSIONS:** Obese ABSSSI patients experienced higher rates of same-hospital ABSSSI-related readmission compared with non-obese patients. The association persisted in male, age <65, and non-MRSA subgroups and remained significant after adjustment for confounding. Further studies are warranted to estimate total readmission rates, which may be underestimated by same-hospital readmission rates.

PSS42

BIBLIOMETRIC ANALYSIS OF THE WORLWIDE SCIENTIFIC PRODUCTION OF ORAL HEALTH

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OBJECTIVES: Identify and analyze the level of scientific production in the oral health field worldwide, by applying quantitative assessment counting methods and bibliometric analysis. **METHODS:** The review was realized using the Scopus database, given its greater coverage according to The Academic Database Assessment Tool. The results were analyzed through production, dissemination, collaboration and bibliometric indicators, which considered the trends in publication, authors, document type, workspace, magazines, country, number of citations, impact factor, h-index and dissemination network. A descriptive analysis was performed from the public policy context in oral health, in addition to the estimation of trends and state of the art investigation. **RESULTS:** 1.727 scientific articles were found through searching terms associated with "oral health" AND "public health" AND "public policy". The annual growth function provided an increased trend since 2000. The United States, Brazil and the United Kingdom were the countries with the highest impact and development in the oral health field, providing 40.7% of the total references found. The production is allied especially to universities and research groups, mainly the University of Sao Paulo, University of Adelaide and University of North Carolina at Chapel Hill. The areas of knowledge with the greater incidence were: medicine (44.1%), Dentistry (39%) and social sciences (4.8%). The search for oral health had an index h: 46. **CONCLUSIONS:** The scientific production in oral health topics shows increasing development and institutional affluence. It is expected that the oral health problems analyzed would have solutions and support from the government of the region and the allocation of resources for health.

PSS43

BIOLOGIC ADHERENCE AMONG PSORIASIS PATIENTS IN THE US MEDICARE POPULATION

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OBJECTIVES: Biologics have provided major advances in the treatment of plaque psoriasis. Little is known regarding adherence to biologics and factors associated with adherence in the Medicare population. This study is the first to examine adherence among Medicare patients with psoriasis newly initiating biologics. **METHODS:** The 2009 to 2012 Medicare 100% files were used to identify patients who received infliximab, ustekinumab, adalimumab, or etanercept between 1/1/2010 and 12/31/2011. The date of first biologic prescription defined the index date. Patients were required to have fee-for-service Medicare Parts A, B, and stand-alone Part D plan coverage in the 12-months pre- and post-index date and have > 1 claim for psoriasis (ICD-9CM code 696.1) in the 12-month pre-index period. Exclusion criteria included presence of other conditions for which these biologics are indicated, or receipt of any biologic in the 12-months pre-index. Adherence to index biologic was defined as patients with proportion of days covered (PDC) > 0.80 during the 12-months post-index. Logistic regression analyses were conducted to determine the factors associated with being adherent. **RESULTS:** Our sample included 2,707 patients newly initiating biologics. Overall, mean PDC for any index biologic was 0.61 and only 38% were adherent to their index biologic in the 12 months following initiation. Mean PDC and adherence rates were similar between physician-administered and self-administered agents, but there were several differences by index biologic. Mean PDCs were 0.66 for infliximab (N=318), 0.70 for ustekinumab (N=280), 0.63 for adalimumab (N=1084), and 0.56 for etanercept (N=1025). Adherence rates were 49%, 43%, 41%, and 29%, respectively. Logistic regression indicated that older age, and female gender were associated with poor adherence. Index biologic was also a significant factor associated with being adherent. **CONCLUSIONS:** Adherence with biologic treatment for psoriasis is poor in the Medicare population with rates <50% across all biologics.

URINARY/KIDNEY DISORDERS – Clinical Outcomes Studies

PUK2

COMPARATIVE EFFICACY OF INTERVENTIONS FOR OVERACTIVE BLADDER SYNDROME: A SYSTEMATIC REVIEW AND NETWORK META-ANALYSIS

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OBJECTIVES: There is a plethora of interventions for the treatment of overactive bladder syndrome, including a course of supervised pelvic floor muscle training, behavioral therapy, anticholinergic medication, sacral nerve stimulation, and more recently, botulinum toxin type A (BoNT-A) and beta-3-adrenergic agonists. Though there is a large and diverse range of treatment options, there is little information of which of them is the most clinically effective. This is largely because trials often compare interventions with a placebo or with interventions of the same class; and so there are a limited number of trials that compare interventions of different classes, and thus different approaches on a head-to-head basis. **METHODS:** We searched Medline, EMBASE, Cochrane Incontinence Group Specialized Register, and all relevant references for randomized controlled trials evaluating interventions for OAB through to October 2014. Using Bayesian Markov Chain Monte Carlo (MCMC) methods, we applied a hierarchical network meta-analysis that accounts for the exchangeability of treatment effects between different modes of administration (e.g. extended and immediate release), between treatments within the same class (e.g. anticholinergics) and the residual between-study heterogeneity. We further adjusted for differences in baseline severity of the patient population, as different interventions are used at varying times in the treatment pathway. The primary outcomes of interest were mean change from baseline for voiding, urgency, and incontinence episodes. **RESULTS:** Preliminary results show that for voiding and urgency episodes, BoNT-A 200u was the most effective intervention. BoNT-A 300u was the most effective intervention for reducing incontinence episodes. **CONCLUSIONS:** BoNT-A was found to be the most effective intervention for reducing symptoms of OAB. Accounting for the exchangeability between different modes of administration and treatments within in the same class sufficiently increases the precision in the treatment effect estimates but maintains the interpretability of the individual and diverse range of treatment options.

URINARY/KIDNEY DISORDERS – COST STUDIES

PUK4

THE BUDGET IMPACT OF TREATMENT PATHWAY REDESIGN IN MEN WITH LOWER URINARY TRACT SYMPTOMS (LUTS) ASSOCIATED WITH BENIGN PROSTATIC HYPERPLASIA (BPH)

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OBJECTIVES: LUTS associated with BPH (LUTS/BPH) in men may present as a combination of voiding, storage and post-micturition symptoms. UK prescribers have proposed two areas of improvement to current care: first, acknowledging that α-blocker monotherapy may not address bothersome storage symptoms; and second, building confidence in primary care to prescribe drug combinations for mixed symptoms. We built a model to evaluate the potential budget savings from implementing these treatment pathway changes. **METHODS:** A model was built in Microsoft® Excel to depict a simplified LUTS care pathway, aligned with current clinical practice and NICE treatment recommendations in a hypothetical cohort of 10,000 men with LUTS/BPH who have moderate-to-severe storage and voiding symptoms. The budget impact of a proposed pathway redesign was calculated, which could adjust the number of men diagnosed and managed in primary care. Men could receive a range of treatment options, and if symptoms persisted, could ultimately be recommended for surgery. **RESULTS:** The model estimated several annual cost savings: –£2,964,169 by increasing the proportion of men diagnosed in primary rather than secondary care from 30% to 40%; –£1,623,701 by increasing the proportion of men receiving initial LUTS treatment in primary rather than secondary care from 50% to 60%; and –£4,114,738 by increasing the proportion of men receiving combination rather than monotherapy from 6% to 20%. A combination of all proposed changes resulted in a saving of –£8,208,061. Varying drug choice or cost were shown to have minimal financial impact. **CONCLUSIONS:** The pathway redesign indicates substantial savings. Specifically, increasing primary care diagnosis and treatment of LUTS/BPH symptoms would avoid referral costs and potentially delay surgery, while increasing general practitioner confidence