the rest of different components ranged from 0.81 to 0.99. All hypothesized correlations with convergent measures were significant (r = 0.40 to p < 0.01), and the MDS shared variation between LQI and tertiles (F = 24.6, p < 0.001). SRI between doctor visits (F = 8.0, p < 0.01) and TBI between illness days (F = 14.9, p < 0.001).

CONCLUSIONS: Consistent with the results found in the United States, the Ensemble MDS observed to have adequate reproducibility, appropriate convergent validity and to significantly discriminate between known groups outside the United States.

Q3

CONCLUSIONS: Counted for 62.86% of the variance with the eigenvalue of 21.373. Cronbach’s alpha.

RESULTS: Internal consistency reliability was tested using exploratory factor analyses, item response theory analyses, and other psychometric techniques were used to assess the reliability and validity of the Actinic Keratosis Risk Questionnaire (AKRQ). RESULTS: The final AKRQ instrument assessed was refined for the results of exploratory factor analysis and item response techniques, ultimately limiting the scale to six items. The resulting instrument had good internal consistency (Chronbach’s alpha = 0.70) and correlations with other validated measures of skin quality of life (r = 0.596 with the DLQI and r = 0.439 with the AKRQ, p < 0.01). The sensitivity, specificity, positive and negative predictive values of the AKRQ was found to be 69.3%, 73.3%, 72.2% and 75.0% respectively.

CONCLUSIONS: The AKRQ is a reliable and valid tool which may help patients self-assess their risk of either having or developing actinic keratosis based on their skin health-related behavior and quality of life symptomatology.

Q4

ASSESSMENT OF THE VALIDITY AND RELIABILITY OF A PATIENT SATISFACTION SURVEY FOR AN EMPLOYER-SUPPORTED MEDICATION THERAPY MANAGEMENT (MTM) PROGRAM

Majercak B, Pinto S, Bechtol R, Borse M
The University of Toledo, College of Pharmacy and Pharmaceutical Sciences, Toledo, OH, USA

OBJECTIVES: Patient satisfaction is a critical component of health care performance in all settings including pharmacy-provided services. Our study aimed to assess the validity and reliability of a newly developed survey used to evaluate patient satisfaction with a medication therapy management (MTM) program in a public health pharmacy setting.

METHODS: This exploratory study used a cross-sectional design. The survey was developed using three previous instruments and using input from practicing pharmacists. The instrument consisted of three sections (experience with the pharmacist, pharmacy, and pharmacy). The data validity was assessed by a review panel of practicing pharmacists and researchers. Final survey consisted of thirty-four items. A five-point Likert scale (1 = strongly disagree to 5 = strongly agree) was used. Data was collected over a one-year period and analyzed using SPSS v. 17.0. Construct validity was assessed by an exploratory factor analysis using the principal components method and a varimax rotation. Internal consistency reliability was tested using Cronbach’s alpha.

RESULTS: Factor analysis with varimax rotation (n = 171) resulted in five dimensions. Upon assessment, we labeled the factors as Experience with the Pharmacist, Experience with the Pharmacy, Experience with the Pharmacy Staff, Satisfaction of Pharmacy Care, and Prescription Promptness. The KMO measure of sampling adequacy was 0.94. Experience with the pharmacist accounted for 62.86% of the variance with the eigenvalue of 21.373. Cronbach’s alpha for the five dimensions was found to be 97.7, 97.5, 96.2, 86.8, respectively.

CONCLUSIONS: Results indicate the survey demonstrates validity and reliability. With health care moving towards a more patient-centered approach and an increasing need to have patients evaluate services provided, the instrument developed for this study can serve as a valuable tool. Pharmacists may utilize this tool to assess their own MTM programs. However, additional testing in other pharmacy settings is recommended for further assessment.

PODUM SESSION III: DRUG UTILIZATION & PRICING

UT1

THE IMPACT OF COMPARATIVE EFFECTIVENESS RESEARCH ON DRUG UTILIZATION IN THE UNITED STATES

Doyle JJ, Selpveda B
Quantum Global Consulting, Houghton, NY, USA

OBJECTIVES: As Comparative Effectiveness Research (CER) gains a stronger foothold in the US Healthcare system we turn our sights on the market implications of conducting “real-world” studies of the effectiveness and safety of a clinical intervention to guide evidence-based practice. Barriers to assimilation of CER in clinical decision-making may be due to market factors such as coverage, reimbursement, and generic availability. This analysis aims to determine what, if any, changes in prescribing patterns might have been precipitated by the findings of CER studies and examines the possible causes of such changes with respect to differences in analytic efficacy, safety, and quality.

METHODS: We analyzed patterns for drugs included in six Comparative Effectiveness Research (CER) studies—one neuroscience, one diabetes and four cardiovascular—before and after publication. We separated and tracked newly launched and new refill prescriptions for the same number of quarterly intervals before and after publication of the studies, ending with Q2 (June) 2011. Drug prescription volumes and average wholesale prices (except where noted) were obtained using SDI Health’s Vector One National Audit. Metrics were compared in the quarters before and after study publication. Statistical significance was determined at the 0.05 level. Analyses of variance were performed using Microsoft Excel, two-tailed t-test.

RESULTS: Drugs included in three of the six CER studies—neuroscience, diabetes and cardiovascular—showed significant changes in new, refill or total prescriptions of the drugs that were consistent with the published findings (i.e. positive changes following positive findings).

CONCLUSIONS: Factors, in addition to the studies’ findings themselves, that could have contributed to the observations include pricing of the drugs compared in the studies and generic availability. We hypothesize that factors impacting adoption of CER results in clinical practice include the number of patients enrolled and the method of dissemination of results.

UT2

IMPACT OF 2009-2011 GLOBAL HEALTH CARE REFORMS ON PRICING, ACCESS AND HEALTH OUTCOMES STRATEGY

Asrparwal S, Agrawal S, Strategies, Bethesda, MD, USA

OBJECTIVES: During 2009-2011 major health care reforms were proposed and implemented in a number of countries, such as, Affordable Care Act in the United States, AMNOC in Germany, HSPT in France, KVG in Switzerland and NHS proposed reform in the UK. These reforms have major implications on pricing, market access and HEOR strategy for drug and device products. METHODS: To understand the implications of these trends, we analyzed 2009-2011 reform bills and proposed changes worldwide. Additionally, we interviewed public and private payers, key opinion leaders and payer-influencers to understand implications of these reforms on drug and device manufacturers. Stakeholders ranked various data collection methods on a scale of 1-10 (1-least important and 10-most important).

RESULTS: The global healthcare landscape is expected to undergo significant change during 2012-2016. In the United States, government will play increased role as a single payer, especially with Medicaid and CHIP programs which will cover 114 million Americans, at a cost of $784 billion. In Germany, AMNOC bill marked the end of free drug pricing and would lead to increased insurance premiums (now 15.5% of wages). In the United Kingdom, NHS has proposed to replace PCTs with national purchasing groups. Randomized controlled trial, budget impact model and systematic reviews —ranked highest (7.5-9.1) among payers. Overall, payers view that in the future, health economic assessments would play critical role in pricing, coverage and reimbursement of branded products. CONCLUSIONS: This analysis shows that the global health care landscape is expected to undergo significant change during 2012-2016. Discussions with payers, KOLs and payer-influencers highlighted increased importance of HEOR data in the future.

UT3

FIRM- AND DRUG-SPECIFIC PATTERNS OF GENERIC DRUG PRICES EXPERIENCED BY UNITED STATES MEDICAID PROGRAMS: 1991-2008

Berry EA, Kelton CM, Voo YP, Guo JF, Bian P, Heaton PR
University of Cincinnati, Cincinnati, OH, USA, 1University of Cincinnati College of Business, Cincinnati, OH, USA, 2University of Cincinnati Medical Center, Cincinnati, OH, USA

OBJECTIVES: After the patent expires for a branded pharmaceutical, generic drug companies generally sell bioequivalent versions of the drug, leading to lower prices. Considering more drugs over a longer period of time than previously in the literature, the objectives were to (1) describe the trends in branded and generic drug prices post-entry, and (2) estimate the effects of drug, firm, and market characteristics on branded and generic prices. METHODS: The primary data source was the Medicaid Drug Utilization Data maintained by the Centers for Medicare & Medicaid Services. Quarterly utilization and expenditure data from 1991-2008 were extracted for 83 drugs that experienced initial generic entry between 1992 and 2004. A relative price for a specific drug, firm, and quarter was constructed as Medicaid reimbursed for unit divided by average reimbursement per unit of the branded drug the year before entry. Autoregressive effects and fixed-effects models were estimated to explain relative drug price. RESULTS: For the 83 drugs, prices for 529 firms were followed from the first quarter of generic entry until 2008. Twelve quarters after generic entry, 17% of drugs had average relative generic price less than 50% of the original branded price. The number of firms had a statistically significant (p < 0.01) negative effect on price. For each additional firm manufacturing the same drug, average price was estimated to fall by 8 percentage points. Higher demand had a statistically significant (p = 0.01) positive effect. No statistically significant price premium for either early entry or firm size was found. Injectable drugs had prices that fell less (p = 0.01) than other drugs. CONCLUSIONS: Results are consistent with earlier studies showing that branded-drug prices rise and generic drug prices fall as more generic firms enter. However, this fall is not strong for injectable drugs or for drugs with high demand.