

PDH20**CONTENT ANALYSIS OF PHARMACOECONOMIC ADVERTISING IN SPECIALTY AND PRIMARY CARE JOURNALS**Sullivan PW¹, Hirsch JD², Nichol MB¹, Conner C², Teratanaut R²¹University of Southern California, Los Angeles, CA, USA;²Allergan, Inc., Irvine, CA, USA

BACKGROUND: As a result of increasing cost consciousness in the health care system, pharmaceutical manufacturers have come under pressure to demonstrate the pharmacoeconomic benefits of their products to health care providers and payers. **OBJECTIVE:** To analyze the content of economic and health-related-quality-of-life appeals in drug advertisements in primary care and specialty journals. **METHODS:** Advertisements from specialty and primary care journals from June 1997 to June 1999 were analyzed. Each message was classified by the content of the appeal as one of eight economic or quality-of-life categories: compliance; direct or indirect economic; patient satisfaction; overall well being; or physical, social or psychological function. Appeals were also classified as explicit or implicit depending on their use of economic or “quality of life” terms (e.g. “cost-effective”). Data were also collected on which type of reference the appeal cited: none, data on file or published reference. **RESULTS:** Sixty-one advertisements were included in the analysis with a total of eighty messages. Appeals were mainly implicit (85%) and related to direct economic messages. Specialty journals had relatively more messages appealing to compliance (29% vs. 8%) while primary care journals had relatively more messages appealing to psychological function (24% vs. 4%). Most appeals cited a published reference to substantiate their message (56%), but 24% of appeals cited no reference. Primary care journals were more likely to cite published references than specialty journals (66% vs. 47%). **CONCLUSION:** In the absence of clearly delineated regulation by the FDA governing the advertising of economic or quality-of-life-related messages, the pharmaceutical industry has focused on implicit messages, avoiding overt appeals to “cost-effective”, “cost-benefit”, “cost-utility”, “QALY” or “quality of life”.

PDH21**PRE-POST AND BETWEEN GROUP DIFFERENCES IN PATIENT OUTCOMES IN A PHARMACEUTICAL CARE INTERVENTION PROJECT**

Kamath TV, Chaikledkaew U, Johnson KA

Department of Pharmaceutical Economics and Policy, University of Southern California, Los Angeles, CA, USA

OBJECTIVE: To determine the impact of pharmacist intervention on various patient outcomes. **METHODS:** 201 patients belonging to one medical group were divided into the experimental group (N = 54) and the comparator group (N = 147). 353 patients belonging to a

second medical group served as the control group. All patients were sent a baseline survey and a follow-up survey after 6 months to gather data on demographics, compliance, quality of care, satisfaction with pharmacy care and disease specific quality of life. During the 6 month period, the experimental group received specialized pharmacist’s services, while the others received usual care. Clinical data, compliance from prescription claims and health care utilization data were collected separately. **RESULTS:** Patient satisfaction with pharmacy services significantly improved at follow-up for the experimental group. The increase in satisfaction at follow-up was significantly higher in the experimental group compared to the comparator as well as the control groups. HbA1c scores for diabetic patients were significantly improved in the experimental (7.8 down to 6.7) group. Adherence to some of the HEDIS guidelines was significantly higher in the experimental group compared to the comparator group. Percentage of high compliers (self-reported Morisky score) significantly doubled at follow-up in the experimental group (24.6% up to 52%) and percentage of low compliers significantly decreased at follow-up (73.6% down to 49.1%). The number of drug therapy problems were detected and reduced by pharmacists’ intervention in the experimental group. Pharmacists were also able to successfully improve patient health behaviors related to medication use in the experimental group. **CONCLUSION:** The pharmacists were successful in improving patient outcomes, thereby providing better patient care.

PDH22**MODELLING THE BENEFITS OF VERTEPORFIN THERAPY IN MACULAR DEGENERATION**Smith D^{1,3}, Fenn P², Drummond M¹¹Centre for Health Economics, University of York, York, UK;²The Business School, University of Nottingham, Nottingham, UK; ³The University of Washington, School of Pharmacy,

Seattle, WA, USA

Age related macular degeneration is the leading cause of legal blindness among those over 50 years old in the Western world and is estimated to affect 20–37% of people aged over 75 years. The only treatment option to date, for the more severe wet form, is laser therapy, but is appropriate for only about 20% of cases. There are several new therapies under investigation, including photodynamic therapy (PDT) with verteporfin, an intravenous infusion followed by timed activation of the verteporfin with a specific light source. **OBJECTIVE:** To estimate effects of verteporfin in terms of vision years gained, a measure suitable for economic evaluation. **METHODS:** Data came from the one year follow-up of a two year Phase III clinical trial of 609 patients randomized verteporfin or placebo. The analysis included only those with predominantly Classic CNV secondary to AMD as this subgroup will be the one initially indicated for therapy. Survival analyses (controlling for baseline vision, age, gender and prior treatment) using a Weibull parametric

hazard function were run to estimate time to thresholds of vision loss. The resulting hazards were used to inform transition probabilities in a Markov model, to estimate effects (discounted at 3%) for an average patient. **RESULTS:** The estimate of vision years gained was 0.57 during the trial, and 0.82 at 5 years. Benefits decreased with age and baseline visual acuity. **CONCLUSION:** Based on one year data, the majority of benefit was estimated to accrue within the trial time frame, and benefits differ across subgroups. Treatment costs may be offset by delaying costs of blindness.

PDH23

RELEVANCE OF PHARMACOECONOMICS AND HEALTH OUTCOMES INFORMATION TO HEALTH CARE DECISION-MAKERS IN THE UNITED STATES

Cox E, Motheral B, Griffis D

The University of Arizona, College of Pharmacy, Tucson, AZ, USA

A key purpose in conducting pharmacoeconomic (PE) and health outcomes (HO) research is to aid in the decision-making process. However, surprisingly few studies within the literature have evaluated the relevance of this information to decision-makers. **OBJECTIVES:** The purpose of this study was to evaluate the relevance of PE and HO information to health plan decision-makers in managing the pharmacy benefit. **METHODS:** A qualitative research method using telephone interviews on a convenience sample of managed care and PBM decision-makers was used. Participants were presented with 16 hypothetical statements incorporating key PE and HO concepts and asked to judge the relevance of the statements. Respondents were also prompted to provide a rationale for their judgement. Questions relating to respondent's training and familiarity with PE concepts were also included. **RESULTS:** Over 80% of respondents (n = 16) were pharmacists, with one-third working for PBMs. Statements related to quality-of-life, cost-of-prevention, cost/year of life saved, increased life expectancy, and 2-year savings were relevant to >80% of respondents. Willingness to pay (WTP), cost to society and global cost of illness statements were considered irrelevant by >35%. Response trends to the above indicate that copays preclude the relevance of WTP information; societal perspectives are generally not relevant to benefit management, and plan demographics are more relevant than global demographics. Statements related to PE modeling were relevant provided that inputs and assumptions were pertinent to the user. Statements reported in terms of quality adjusted life year were difficult for respondents to conceptualize. **CONCLUSIONS:** These findings suggest that some PE and HO information is more relevant than others in the management of the pharmacy benefit.

PDH24

PHARMACEUTICAL INDUSTRY PERCEPTIONS OF THE USE OF PHARMACOECONOMIC DATA BY HEALTH CARE ORGANIZATIONS

Armstrong EP, Abarca J, Motheral BR, Grizzle AJ

College of Pharmacy, The University of Arizona, Tucson, AZ, USA

The pharmaceutical industry (PI) is a principal provider of pharmacoeconomic (PE) data to health care organizations (HCOs). Therefore, assessing how this information is perceived and used by HCOs from the PI perspective can provide insights for future development of PE information. **OBJECTIVES:** The purpose of this study was to describe the PI perceptions regarding the use of PE information by HCOs. **METHODS:** A structured phone interview was conducted with PI personnel who routinely interact with HCOs, including account managers, scientific liaisons, and PE/outcomes research managers. Participants were asked to comment with regard to the frequency of use and importance of various types of PE information that is provided to HCOs. **RESULTS:** A total of 21 subjects were interviewed. About 95% stated that the PE information provided to HCOs in the previous year was helpful. The majority of respondents (76%) stated PE information was considered by HCOs for most or some decisions. There was significant variation when asked whether PE articles were relevant, credible, and understandable to HCOs. Reprints of PE data and HCO-specific information were most commonly listed as best-received by HCOs. A majority (81%) also felt there were barriers to using PE information in HCOs; "isolated focus on the pharmacy budget" was listed as the most common barrier. Only one-third of respondents felt their company met the PE needs of HCOs. The remainder listed lack of PE information as the primary cause for not meeting the PE needs of HCOs. **CONCLUSION:** While respondents felt that PE information is commonly used and is perceived as valuable, this study has identified potential limitations to the currently available information.

PDH25

A QUALITATIVE ASSESSMENT OF MANAGED CARE DECISION-MAKER'S VIEWS AND USE OF PHARMACOECONOMIC INFORMATION

Grizzle A, Motheral B, Garrity B, Cox E, Armstrong E

University of Arizona, College of Pharmacy, Tucson, AZ, USA

Much emphasis is currently being placed on determining the proper methodology for conducting economic analyses of pharmaceuticals. However, perhaps equally important is the need for consideration of how this information is actually being used by decision-makers. The most recent examination of this issue occurred in 1996. **OBJECTIVES:** The purpose of this study was to increase our understanding of how pharmacoeconomic information is used by decision-makers in managed care and to identify perceived strengths and weaknesses of the available information given the current state of the pharmacy bene-