

burdens, i.e., HRQoL decrements, for the 31 conditions as measured by the EQ-5D US ranged from -0.002 to -0.195 on this scale. Modeling disease-burden from other systems to the EQ-5D US exhibited excellent fit (R^2 all > 0.85). When tested in MEPS, the predicted disease-burdens in the EQ-5D US were slightly biased (0.0012 from SF-6D(12), 0.0083 from EQ-5D UK). Tested in USVEQ data, the predicted disease-burdens for the EQ-5D US were more biased (0.0125 from HUI Mark 2, 0.0144 from HUI Mark 3). The standard deviation of differences between predicted and actual disease-burdens was around 0.01 for most measures. **CONCLUSION:** This method produces relatively unbiased estimates for disease-burden across HRQoL scoring systems. Current error variance associated with this method limits its usability. Future work should examine non-linear cross-walks between HRQoL scores.

PR3

PREFERENCE VALUES FOR HEALTH STATES ASSOCIATED WITH COLON CANCER AND ITS TREATMENT

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OBJECTIVES: To elicit preferences for the spectrum of health states associated with Stage III colon cancer (CRC) and to explore the effect of neuropathy associated with current standard of care for adjuvant treatment. **METHODS:** We interviewed CRC patients and clinicians, developed health states and used time trade-off (TTO) to elicit preferences from a convenience sample of CRC patients and community members. We elicited preferences for 7 health states: remission (REM); adjuvant therapy with no (ADJ_NO), mild (ADJ_MLD), moderate (ADJ_MOD), and severe (ADJ_SEV) neuropathy; metastatic stable (MET_ST); and metastatic progressive (MET_PR) disease. Each subject valued a randomly selected subset of 5 health states. T-tests were used to test for differences in preferences. **RESULTS:** Mean ages of the 49 patients and 49 community members were 60.6 and 59.8 years, respectively. 51% and 57% were male, respectively. Mean TTO values (95% CIs) for patients/community members were: REM 0.87 (0.81, 0.93)/0.83 (0.77, 0.89); ADJ_NO 0.67 (0.55, 0.80)/0.62 (0.50, 0.74); ADJ_MLD 0.65 (0.49, 0.82)/0.52 (0.39, 0.65); ADJ_MOD 0.58 (0.40, 0.76)/0.48 (0.35, 0.61); ADJ_SEV 0.48 (0.30, 0.65)/0.35 (0.22, 0.49); MET_ST 0.46 (0.30, 0.62)/0.54 (0.42, 0.65); MET PR 0.38 (0.21, 0.56)/0.21 (0.09, 0.34). Significant differences were observed for both groups between TTO for REM and adjuvant health states and between ADJ_NO and metastatic health states ($p < 0.04$), except for ADJ_NO vs. MET_S within the patient group. There was a non-significant trend for patients to place a higher TTO value on all health states than community members ($p = 0.20$). **CONCLUSION:** These findings highlight the trade-offs between the disutility of adjuvant treatment (particularly with moderate to severe neuropathy) and the higher utility of remission, and the severe utility loss during metastatic disease. The preference values obtained from this study will be useful for informing cost-utility analyses of treatment through progression of colon cancer.

PR4

VALUING CHILDREN'S HEALTH FOR ECONOMIC EVALUATIONS: THEORETICAL AND METHODOLOGICAL CONSIDERATIONS

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OBJECTIVES: To identify theoretical and methodological challenges to valuing children's health for cost-utility or benefit-cost analysis. **METHODS:** We reviewed the most common approaches, quality-adjusted life years and willingness-to-pay values, for valuing health in economic evaluations and considered methodological and practical issues associated with measuring child health using each framework. **RESULTS:** The review of theoretical and practical challenges suggests that both areas pose challenges to valuing child health. Practical challenges include elicitation issues and the consideration of household effects of child illness. One challenge is the inability of young children to value changes in health directly and the potential biases associated with using proxy respondents. The most appropriate elicitation method will vary by age of the child under consideration. Another key challenge arises from the status of children not as independent economic actors, but as being dependent on others for care and decision making. In addition, illness in children may also affect parent/caregiver quality-of-life further complicating the measurement of value associated with the change in a child's health status. From a theoretical perspective, "value of a child's health" has not yet been adequately defined if one accepts that many children are insufficiently mature to have informed, considered preferences over health states. **CONCLUSION:** Recommendations for moving the field forward in valuing child health for economic evaluations will vary by age; a "one size fits all" approach does not readily fit. Future research should focus on minimizing bias from proxy respondents, consideration of a family or household-based approach to valuing health effects, and development of generic instruments for children with age-appropriate domains.

PODIUM SESSION IV: DIABETES

DBI

IMPACT OF MAJOR PHARMACY BENEFIT CHANGE ON DIABETES DRUG UTILIZATION

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OBJECTIVE: Appropriate utilization of diabetes medications is key to improving clinical and financial effects of the disease. Pharmacy benefits may contain barriers to patients utilizing these medications. This study assessed the impact of elimination of member cost share and other benefit barriers on utilization of diabetes medications. **METHODS:** Study used a pre-post comparison of 1281 individuals whose pharmacy benefits were provided by an employer that eliminated benefit barriers (member cost, refill restrictions, prior authorization) on 1/1/2006. Eligible study participants had continuous eligibility for pharmacy benefits from 1/1/2005 through 12/31/2006 and filled prescriptions for diabetes medication both before and after the benefit design change date. Adherence to therapy was measured by a weighted average of the therapeutic class Medication Possession Ratio (MPR) and was calculated during the period prior to the benefit change (January 1, 2005–December 31, 2005) and following it (January 1, 2006–December 31, 2006). **RESULTS:** Study population was 45% female (mean age 46.6). Subsequent to benefit design change, MPR increased by 2.0% (78.2% to 80.2%; p -value = 0.003) for core diabetic therapy (insulin, sulfonylureas, metformin or combinations). Proportion of members with optimal adherence (80% or more MPR) increased from 58.6% to 64.9% (p -value < 0.001). Average number of prescriptions per member did not change (11.7 vs. 11.7; p -value = 0.95), but days supply increased significantly (362 days vs. 459 days; p -value < 0.001) with no detectable increase in mail utilization. Proportion of members using adjunct therapy (glucosidase inhibitors, amylin