UTILITIES SHOULD NOT BE MULTIPLIED: EVIDENCE FROM THE PREFERENCE-BASED SCORES IN THE UNITED STATES

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OBJECTIVES: Several estimators exist when average utility scores are not available for patient populations with multiple disease conditions. The multiplicative estimator is a widespread choice among them. Our study is to empirically test the accuracy of the multiplicative estimator and compare it with other estimators.

METHODS: The Medical Expenditure Panel Survey (MEPS) has a nationally representative sample of the US civilian non-institutionalized population. Using the pooled 2001 and 2003 data, a sample of 40,846 individuals with EQ-5D index scores were categorized into 238 disease condition categories. The study focus was the difference between the estimated and the observed mean scores for each comorbid pair, with the observed one presumed to be the true value.

RESULTS: The scores estimated by multiplying the two mean scores of the corresponding disease conditions on average had a statistically significantly larger difference (p < 0.0001) from the observed ones (−0.094) than simply picking the smaller mean of the two paired conditions (difference = 0.025), the larger mean of the two (difference = 0.071), the average of the two means (difference = 0.048), or the mean of the condition with smaller sample size of the pair (difference = 0.049). However, the multiplicative estimator performed better than the additive estimator (sum of the means minus 1, difference = 0.123).

CONCLUSIONS: Multiplication is not a good estimate when the average utility score for patients with two disease conditions is not readily available. The lower of the two utility scores had the least error among those estimators that we compared. Further research with an experimental design is warranted before a specific alternative can be firmly recommended.

POSTER SESSION I

HEALTH CARE USE & POLICY STUDIES—Consumer Role in Health Care

CONSUMERS’ PERCEPTIONS OF DRUG EFFECTIVENESS AND PRICES IN GREECE
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OBJECTIVES: Investigate Greek adults’ perceptions of drug effectiveness and prices. METHODS: A structured questionnaire was used in a telephone survey in order to derive data from a national random sample of 1000 adults, stratified by age, gender and geographic region. Physicians and pharmacists were excluded from the sample. The study was conducted in June 2007. The response rate was 93.0%. RESULTS: Drugs were considered by the majority of respondents (75.7%) as safe and effective as well as very important for medical practice (65.2%). Respondents believed that new drugs are of a higher price (67.8%), however these were perceived as more effective than older ones (79.4%). Regarding the prices of drugs in Greece, one out of two respondents believed that the prices are extremely high. Women as opposed to men expressed the less positive opinion on the implemented pricing policy. The majority of respondents (81.4%) recognized that the cost of R&D should be included into the price of the drugs, but they think that the pricing regulation of drugs is in favor of pharmaceutical industries (90.1%). Furthermore, they expressed the opinion that prices should be as low as possible regardless of the effectiveness. On the other hand, they claimed that physicians should always prescribe the most effective drug regardless of its price. The majority of respondents (89.4%) reported that polypharmacy and irrational prescribing are major problems in Greece and considered doctors to be primarily responsible, followed by the absence of audit in the health system. CONCLUSIONS: Despite the fact that drugs prices are considered high, Greek adults have a strong positive view regarding their safety and effectiveness. Knowledge on both the public’s perception regarding drugs and