FACTORS ASSOCIATED WITH TTO UTILITY CHANGES AMONG OLDER PEOPLE AT VETERAN HOME
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OBJECTIVE: Time-trade-off (TTO) method is an important tool in health utility measurement but the contribution factors regarding its change especially on elder remains unclear. Purpose of this study was to explore the factors associated with TTO utility changes among old people. METHODS: A total of 288 male veterans aged above 65 years were longitudinally followed up one year for time-trade-off (TTO) utility. The data on WHOQOL-BREF (Taiwan version), socio-demographics, health status, health behaviors, home care, and health perception including rating scale (RS), self-rating health, and self-rating happiness were also collected. Wilcoxon rank sum test and Spearman correlation were used to select candidate of factor. Multiple regression analysis was performed to explore the contribution factors with the changes of TTO utility. RESULTS: The mean [SD] of TTO utility (0–1) for participants was 0.89 [0.25] at baseline and changed into 0.78 [0.34] after one year. Several factors at baseline were associated with the changes of TTO significantly (p < 0.05) and independently including: age group, education level, rank when retired from army, stroke, respiratory diseases, number of office visits to a doctor, RS, self-rating health, physical domain and 9 facets of WHOQOL-BREF. After considerations of the collinearity of the variables and the simplicity of the models, variables entered in the final multiple regression models were: education level, stroke, RS, and “dependence on medical substances and medical aids” facet of WHOQOL-BREF (R2 = 0.12). CONCLUSIONS: Several variables were associated with TTO utility changes significantly and independently among old people at veteran home. Education level, stroke, RS, and “dependence on medical substances and medical aids” facet of WHOQOL-BREF were associated factors of TTO utility changes in the final regression model. Due to the large variation of TTO utility changes the percentage of the variance accounted by the variables was small.

EXPLICIT INDICATORS TO MEASURE PREVENTABLE DRUG-RELATED MORBIDITY IN AN ELDERLY POPULATION
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OBJECTIVE: To develop consensus-approved explicit indicators of preventable drug-related morbidity (PDRM) and use these indicators as a quality measure in an elderly population. METHODS: The Delphi technique was used with a 7-member geriatric medicine expert panel to come to consensus on explicit indicators of PDRM in the elderly. The indicators were constructed using a pattern of care and an associated outcome. Measurement of PDRM involved application of the indicators to a large database. Patients eligible for the study were over 65 and had the MCO Medicare plan for at least 12 months during an 18-month window. The pattern of care and the associated outcome had to be present in temporal order to be considered a PDRM event. Risk factors and economic outcomes were measured as a part of the database analysis. RESULTS: The Delphi panel came to consensus on 49 indicators of PDRM. There were 11,711 patients eligible for the study in the MCO’s database. Of those elderly patients who were eligible, 966 (8.2%) had at least one instance of PDRM. The most prevalent PDRM events centered around congestive heart failure, asthma, COPD, and GI bleeding. The presence of PDRM was significantly associated with the number of prescriptions, number of diagnoses, number of prescribers, and patients over 85. Patients with a PDRM event used significantly more health care resources and cost more to care for than those without an event ($16,821 versus $3423). CONCLUSION: This study is important in its development of explicit indicators for PDRM and linking the presence of the pattern of care with the corresponding adverse outcome. These indicators may be used to measure and monitor the performance of the medication use system and change the delivery system to improve patient outcomes. These changes may occur at the individual patient level or at a system level.
Utilization characteristics from a managed commercial health plan with a 3-tier benefit design were used for comparison. Prescription utilization data statistics such as per member per month costs and utilization and types of drug used were calculated. The top five therapeutic classes ranked by drug cost per member per month were also identified and compared. RESULTS: Mail order penetration was 5.9% with Medicare and 3.6% for commercial businesses. Mean age of pharmacy utilizers was 73.1 and 50.6 years in Medicare and commercial business, respectively. Generic utilization was lower for mail order versus retail pharmacies (46.9% and 54.8% for Medicare and 34.8% and 46.2% for commercial business, respectively). Prescription volume was 30.8 and 9.4 per member per year in Medicare and commercial business, respectively. Mean ingredient cost was lower in Medicare plans ($43.79 versus $56.68 in commercial business), while mean copay was higher in Medicare plans ($27.92 versus $20.08 in commercial business). The top therapeutic classes, as ranked by ingredient cost per member per month, were similar for both Medicare and commercial businesses. For Medicare business, the top classes were antihyperlipidemics, antihypertensives, ulcer drugs, and antidiabetic agents. For commercial business, the top classes were antihyperlipidemics, ulcer drugs, antidepressants, and antidiabetic agents. CONCLUSIONS: Prescription utilization patterns and drug mix for members in Medicare programs and commercial health plans differed, mainly driven by benefit design and coverage policy. Understanding of these differences are essential to effective Medicare pharmacy program design.

HEALTH POLICY

HEALTH POLICY—Consumer Advertising

CONTENT ANALYSIS OF PRINT DIRECT TO CONSUMER DRUG ADVERTISEMENTS TO DETERMINE NUMBER AND SPECIFICITY OF RISK STATEMENTS

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OBJECTIVE: The objective of the current study is to determine number and the specificity of risk factors (side effects, specific side effects, contra indications, total number of sentences) disclosed in a typical direct-to-consumer print advertisement published in 2002. METHODS: Content analysis is a research technique for the systematic classification and description of communication content to certain usually predetermined categories. All product specific prescription drug advertisements appearing in seven consumer magazines from January 2002 to December 2002 were collected. The sampling of magazines was purposive. The magazines were selected based upon their circulation and appeal. All the four variables were defined explicitly. Side effects were defined as any unwarranted secondary and adverse effects of the drug. Specific side effects were defined as those side effects, which were stressed upon, and where more information was provided. Contraindications were defined as statements that contraindicate the use of the advertised drug in specific populations or situations. The total number of sentences was defined as the total number of sentences in the print advertisement that contained any of the side effects, specific side effects or contraindications. Judges were trained to determine the validity of operational guidelines. Cohen’s Kappa was used to determine inter-rater agreement. Each brand name drug advertisement served as the unit of analysis. Descriptive statistics were the primary tool for analytical procedures. RESULTS: A total of 349 advertisements were identified which represented 40 distinct brand drugs. There was an average of 4.6 side effects per advertisement. Of these, 0.7 specific side effects were mentioned per advertisement. Each advertisement contained an average of 1.7 contraindications and 2.55 sentences. CONCLUSION: Advertisements contained only an average of 2.55 risk statements. The average number of side effects disclosed in a typical advertisement is less than five. More than half of the advertisements did not mention specific side effects.

HEALTH POLICY

HEALTH POLICY—Pharmaceutical Industry Issues

STOCK MARKET VALUATION AND FIRM-LEVEL DETERMINANTS OF INNOVATIVE ACTIVITY IN THE PHARMACEUTICAL INDUSTRY

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OBJECTIVE: The objective of this research was to examine the relationship between financial valuation and both firm- and industry-specific measures of technological change for firms