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 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 ($R^2 = 0.12$). 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.