Abstracts

The Impact of Medicare New Drug Benefit (Part D) on the Utilization of Psychotropic Medications and Consequent Out of Pocket Expenditure for Elderly

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OBJECTIVE: To evaluate the effect of Medicare new drug benefit (Part D) on utilization of psychotropic medications and the consequent financial burden for elderly. METHODS: The effect of Medicare Part D was measured using 24 months pharmacy claims collected from one of the largest retail pharmacy chains in the United States. Among the approximately 70 million individuals who filled prescriptions at the pharmacy chain in 2006, 11% were 65 years or older. Segmented regression of interrupted time series analysis was employed to evaluate population level changes in the utilization of three most commonly used psychoactive therapeutic categories among elderly, namely antidepressants, antipsychotics and benzodiazepines. RESULTS: Since Part D came into effect, the proportion of out-of-pocket payment in total pharmacy reimbursement decreased 18% for antidepressants (net saving: $4.5 per prescription) and 21% for antipsychotics (net saving: $5.7 per prescription). In contrast, the out-of-pocket share the elderly paid for benzodiazepines increased 19% (net increase: $2.8 per prescription). Part D implementation was associated with significant month-to-month increase in use of antidepressants [1679 prescriptions per month (95% CI: 719, 2639)] and antipsychotics [567 prescriptions per month (95% CI: 413, 720)]. By December 2006, the antidepressant and antipsychotic prescriptions filled by seniors grew 7% (from 273,166 to 293,390 prescriptions per month, P < 0.001) and 18% (from 41,079 to 48,276 prescriptions per month, P < 0.001) respectively as compared to the expected level estimated based on prior Part D trend. In contrast, Part D led to an immediate and sustained drop of 5% (from 238,961 to 226,622 prescriptions per month, P < 0.001) in benzodiazepine prescriptions filled by elderly. CONCLUSION: Our findings revealed that Medicare Part D improved the access to psychotropic medications covered under plan through reducing out-of-pocket expenses. However, the financial burden related to psychotropic medications excluded from the Part D formulary, such as benzodiazepines, has significantly increased.

Research on Patient Reported Outcomes Methods

Rasch Rating Scale Analysis of the EQ-5D Using the 2003 Medical Expenditure Panel Survey (MEPS)

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The aim of this study was to assess the Rasch measurement properties of the EQ-5D in respondents with most prevalent chronic conditions. Medical Expenditures Panel Survey (MEPS) respondents’ age ≥ 18 with complete EQ-5D data from 2003 were extracted (n = 19,439). Eleven subgroups were identified using the primary ICD-9-CM code for the top 10 chronic conditions (hypertension, diabetes, depression, back disorder, arthropathy, cholesterol, asthma, sinusitis, anxiety and joint disorder) as well as healthy persons (n = 8021). Respondents with perfect scores demonstrating ceiling (n = 3911) and floor effects (n = 3) were removed to ensure uncertainty in the responses. Coding reflected that higher scores represent healthier respondents. The Rasch rating scale model was used to estimate one set of thresholds for all items. Unidimensionality was assessed using a z-score fit statistic, point-biserial correlations and Rasch residual factor analysis. Differential item functioning (DIF) was investigated in a pooled analysis of the 11 subgroups. Qualitative advances of the thresholds and positive point-biserial correlations were found on the EQ-5D items in all subgroups. Residual factor analysis revealed that a single factor explained between 74.9% and 94.4% of the variance. Further, respondents with different diseases demonstrated different orders of item difficulty. However, the item “anxiety/depression” consistently showed misfit (z-score > 2.0) in all subgroups. Overall, differential item functioning was found across the 11 subgroups, suggesting that respondents with different health conditions endorsed items with different frequency. For the most part, items in the EQ-5D contribute to a single underlying construct and may be used to evaluate different disease conditions. However, consistent item misfit of the “anxiety/depression” item in all subgroups suggests that a possible modification on this item may be needed.

What Patients Say vs. What Patients Mean: Qualitative Research in PRO Development

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The value of qualitative research in the development of Patient-Reported Outcome (PRO) measures has been recognized for many years. Very little information is available, however, in the PRO field on the conduct and analysis of qualitative research compared to the plethora of literature that is readily available on psychometrics. More recently, the focus has been placed on the concepts being measured and their meaning, and not in terms of correlation coefficients or factorial structure, but in their authenticity for patients. This paper that is authored by an international, interdisciplinary group of psychologists, psychometricians, regulatory experts, a physician, and a sociologist presents a method for developing PROs that are based on a foundation of