Abstracts

**PHP7**

**COMPARING POTENTIAL STRATEGIES TO ELIMINATING MEDICARE PART D’S COVERAGE GAP**

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OBJECTIVES: Eliminating the Medicare’s coverage gap is on health reform’s agenda. This study compares the implications of current House and Senate bills on closing the donut hole as well as use of generic drugs on three outcomes: 1) proportion of beneficiaries entering the gap; 2) duration in the gap; and 3) total and out-of-pocket annual pharmacy spending. METHODS: 2007 pharmacy data of a random sample of beneficiaries enrolled in a Medicare-Advantage Part D plan were used to evaluate these outcomes under three proposals: 1) reducing the size of the donut hole 25% billy; 2) reducing the size of the donut hole 50% for brand-name used in the donut hole (House bill); and 3) switching to generic drugs after several brand-names go off-patent by end-2011. RESULTS: Under 2007 Part D, 20% beneficiaries entered the gap and 3.3% entered the catastrophic period. People stayed in the gap for 132 days, their total pharmacy spending was $4561, with $2337 out-of-pocket and $2224 by Medicare. Under the Senate bill, 14% would enter and 3.5% would go through the gap. Those entering the gap would stay there for 120 days and their total pharmacy spending would be $5214, $2788 out-of-pocket and $2426 by Medicare. The House bill would save additional $791 among beneficiaries entering the gap. Several blockbusters including Lipitor, Zyprexa, Prevacid, NovoRcept, Aricept will go off-patents by end-2011. If patients switched to their generic counterparts, 17% would enter the gap and 1.8% would enter the catastrophic period. People would stay in the gap for 128 days. People would spend $4476 total, $2115 out-of-pocket and $2361 by Medicare. CONCLUSIONS: Reducing the gap size can delay entering the gap, but may not reduce beneficiaries’ out-of-pocket spending. A strategy combining it with generic use could be more effective.

**PHP8**

**BENEFICIARY CHOICE IN MEDICARE PART D**

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OBJECTIVES: To empirically assess the preferences of Medicare beneficiaries in their selection of an approved Part D prescription drug plan. METHODS: A descriptive analysis illustrated the tendencies of those Part D beneficiaries who independently chose their 2007 Part D plan to keep their previous drug coverage and another available Part D plans. The final study sample included the 2007 Internet survey respondents who by (October 2007) were at least 65 years old and insured through Medicare Part D and excluded the Part D beneficiaries automatically enrolled in a Part D plan. People were cross-sectional, using the 2007 Internet Survey conducted by the Health and Retirement Study. A logistic regression model measured the collective explanatory power of a set of six variables describing beneficiary formulary preferences, a variable describing beneficiary plan knowledge, and a set of three demographic variables in determining beneficiaries’ choice to keep their prior Part D drug plan. The outcome and explanatory variables, except for two demographic variable representing respondent wealth and age, were coded as binary. RESULTS: Due to missing values, a total of 74 part D beneficiaries were included in this study. Of the Part D beneficiaries who independently chose their 2007 plan coverage, 82.8% kept their same coverage in 2007 as in 2006 and 71.9% looked at other available formulary plans. The likelihood ratio chi-square score of 21.38 (p < 0.019) and 0.03 (p = 0.041) are likely to hold on to their 2006 coverage. CONCLUSIONS: In order to assess the efficiency of the Part D program, it is important to understand the important factors surrounding beneficiary choice.

**PHP10**

**COST CONSEQUENCE ANALYSIS OF PRESCRIPTION DRUG LABEL CHANGES**

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OBJECTIVES: According to a mandate, all California pharmacies will be changing to a new “patient centered” prescription label beginning January 2011. An increase in label size was needed to comply with federal additional information requirements that are being considered. This cost consequence study explored the impact of label changes to California pharmacies and projected to all US pharmacies. METHODS: A cost model was built based on input from 3 experts. It included: 1) continuing costs: bottle, cap or closure, label (dual web sheet paper vs. thermal roll, paper used, glue used), and 2) One-time costs: software program, additional storage area and staff training. Average additional costs for increasing bottle size from 13 dram to 30 dram, increasing label size and added adhesive was estimated to be 10.5 cents. A literature search conducted to estimate consequence of label change identified only two articles that addressed the impact of a new commercial label on health outcomes and medication safety. RESULTS: The additional costs to pharmacies for the new label would be close to $14 million ($372M for US) assuming 324 million prescriptions are filled by retail and mail order pharmacies annually in California (3.54 billion prescription orders). The cost to each of 6000 California pharmacies will increase annualized costs of $5770 dollars each year. Software changes were assumed to be zero cost. Additional storage and employee training were dealt with differently by each pharmacy hence were used as parameters for a sensitivity analysis. The two studies on consequence did not show any significant difference in impact on outcomes between using the new label and a traditional label. CONCLUSIONS: Additional costs of label change per pharmacy may not be considered significant; however these costs could be transferred to patients as pharmacies are already experiencing financial constraints.

**PHP12**

**THE RELATIONSHIP OF RESEARCH AND DEVELOPMENT ACTIVITY WITH U.S. MEDICAL DRUG SHORTAGES**

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OBJECTIVES: In an earlier study, we explored the characteristics of the medical drugs and devices in short supply on or before June 1, 2009. In this study, we looked at the impact of characteristics of the individual manufacturers for the shortages. In addition, we examined the possible association for firms with significant research and development (R&D) operations and the number and average length of shortages. METHODS: We assembled an expert panel to determine the R&D status of these firms based on their probability of developing new drug products. We then conducted statistical analyses to test several null hypotheses: 1) that there is no association between a firm’s R&D activity and the number of drugs in short supply for which it is listed; 2) that there is no association between a firm’s R&D activity and the average length of its shortages; 3) that there is no difference between firms with significant R&D operations and other firms in regard to the number of shortages for which they are listed; and 4) that there is no difference between firms with significant R&D operations and other firms in regard to the average duration of their shortages. RESULTS: We failed to reject the null hypotheses for overall, active, and resolved shortages, except in one case. We did find that there was no significance in most of these associations except in the relationship between a firm’s R&D status and the length of its resolved shortages. CONCLUSIONS: Based on this data, these results suggest that firms classified as being research-intensive did not have significantly more drugs in shortage or simply longer durations of shortages focused on R&D had longer resolved shortages. We intend to continue investigating other manufacturer characteristics and their possible association with shortages.

**PHP13**

**MEDICARE PART D AND ITS IMPACT ON PRESCRIPTION DRUG USE**

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OBJECTIVES: Significant fraction (approximately 30%) of elderly were without prescription drug coverage prior to Medicare Part D. Medicare Part D provided a subsidized prescription drug benefit to all elderly beneficiaries. The objective of this study is to estimate the impact of Medicare Part D on prescription drug utilization, and other sociodemographic, economic variables. The sample was limited to those age 65–85 years with complete year of data, either uninsured or who had private coverage. Prescription drug coverage was calculated for each month, if respondent had coverage for at least 6-months they were assumed to be privately insured. We estimated the likelihood of independently chosing use pre-Medicare Part D data from 2000–2003. We then compared changes in prescription utilization pre- to post Medicare Part D for those more and less likely to be uninsured prior to Part D. RESULTS: In year 2005, approximately 30% of our sample did not have any prescription drug coverage. After Part D was introduced, only 10% of the sample report not having any prescription drug coverage. On an average, total number of prescription used increased by 5 from 2005–2006. Part D also included discount cards which were introduced in June 2004. The results indicated that discount cards increased the number of prescriptions by 3. Therefore, total impact of part D was approximately 8 more prescriptions. These results were supported in multivariate models (p = 0.01) controlling for various demographic and economic factors. CONCLUSIONS: Medicare part D increased prescription drug use significantly among elderly non-Medicare population. Future analysis should assess the impact of part D on health care utilization and health.