Title:

Metropolitan Variation in Adherence to Cholesterol Lowering Therapy and Cardiovascular Hospitalizations for the Medicare Part D Low Income Subsidy Population

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Abstract:

Objective: To explore metropolitan variation of Medicare Part D Low Income Subsidy (LIS) enrollment and to examine differences in adherence to cholesterol medications and in cardiovascular hospitalizations.

Data Source: Secondary data from 2006 to 2008. The Medicare Part D claims, MedPAR and enrollment data for the enhanced 5% Medicare sample will be used with the Census Bureau's American Community Survey (ACS) to examine metropolitan counties within the United States. Community-dwelling, Medicare beneficiaries aged 65 and older and residing in metropolitan areas are the study population.

Study Design: The observational study design will provide a descriptive analysis using GIS to produce maps that show the geographic variation of enrollment and eligibility of the Part D LIS program and a statistical analysis of the individual-level Medicare claims data that tests determinants of adherence and clinically-related hospitalizations. Key variables operationalized in the study are prescription drug adherence of cholesterol-lowering medications, hospitalizations due to cardiovascular conditions, and Part D LIS eligibility.

Data Methods: The administrative Medicare data will be used to measure the enrollment estimates and clinical outcomes. A cohort from the 5% sample will be selected from the prescription drug data based on the Medispan "Antihyperlipidemics" therapeutic classification of the 11-digit NDC. This cohort will then be matched with the administrative enrollment data to determine the LIS

enrollees. LIS has structured premium subsidies and coinsurance/co-pay tiers based on the beneficiary's income. Enrollees in the first LIS tier will be excluded from analysis because this indicates institution-dwelling Medicare-Medicaid beneficiaries. ACS data will be used to construct population estimates for the LIS-eligible population in metropolitan areas based on income and poverty-level. Metropolitan counties are the lowest level of geography available in ACS for producing reliable population estimates.

Principal Findings: Approximately 40 percent of Part D enrollees receive premium subsidies or cost-sharing from the LIS program. Enrollment in the LIS program based on potentially eligible populations varies considerably with UT and CT having the highest eligible enrollment and WI, KY, TN, and MS having the largest gap. The statistical analysis will focus on the relationship between this geographic variation and the clinical outcomes of adherence and hospitalizations.

Conclusions: Additional research should focus on other therapeutic drug classes and the corresponding clinical outcomes to examine other chronic conditions. The proposed analysis focuses on most common therapeutic class.

Implications: The Social Security Administration in conjunction with the Centers for Medicare and Medicaid Services have targeted advertisements and information campaigns to alert seniors that they may be eligible to enroll in the LIS program. One of the latest examples was released on Monday, November 15 at the start of the 2011 open enrollment period that features Chubby Checker doing the twist and encouraging seniors to apply for "extra help" with the Medicare prescription drug program. The omission of a reference to the program title in the commercial is an avoidance of using the term "low income" and the stigma that may be associated with it. The findings from this study examine the consequences of regional variation in the LIS program for Medicare beneficiary health and expenditures.

Topics: Medicare, Poverty and health, Geographical Variation in Health and Healthcare