**METHODS:** Quasi-experimental, pre-post with comparison groups design using 6109 adult patients in a large, western U.S. managed care organization with one or more of the following conditions: arthritis, diabetes, dyslipidemia, GERD, or hypertension. The intervention group consisted of members whose prescription drug coverage converted from a 2-tier to a 3-tier benefit (n = 4239). Comparison groups included those whose benefits remained in a 2-tier (n = 592) or 3-tier (n = 1278) structure. Medication adherence rates were measured in the pre and post periods using the medication possession ratio. Demographic and attitudinal measures were obtained from a mail survey during the pre period. Statistical analyses were based on maximum likelihood estimates from a repeated measures model to test for differences in medication adherence controlling for the effects of demographic variables, health status, comorbid diseases, pharmacy plan type, and patient satisfaction.

**RESULTS:** Adherence rates ranged from 90.4% to 95.5% in the pre period. The mean adherence rate in the intervention group decreased from 94.7% (pre period) to 90.2% (post period), a decrease of 4.5%. Similar decreases occurred in the comparison groups: from 95.5% to 91.7% (−3.8%) for 2-tier subjects, and from 92.9% to 90.4% (−2.5%) for 3-tier subjects. The decrease in the intervention group was significantly larger than the decrease in the 3-tier subjects (p = 0.0003) but not statistically different from the decrease observed in the 2-tier subjects (p = 0.27). Adherence increased slightly as age and number of chronic conditions increased. No relationship was observed between medication adherence and patient satisfaction (p = 0.35 in the pre period).

**CONCLUSION:** Medication adherence rates were high in the population studied. Changes in benefit design (from 2 to 3-tier drug benefits) had no appreciable impact on adherence.

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**AN ANALYSIS OF THE EFFECT OF MANAGED CARE IMPLEMENTATION ON PRESCRIPTION DRUG UTILIZATION BY TEXAS MEDICAID CLIENTS**

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**OBJECTIVES:** This study measured prescription drug utilization and payment changes when Texas Medicaid clients in one County Service Area moved from a fee-for-service (FFS) to either a health maintenance organization (HMO) or primary care case management (PCCM) health care delivery model (N = 72,172). The purpose of this study was to assess the effect that the managed care programs had on the prescription drug utilization of Medicaid clients who had a carved-out prescription drug benefit.

**METHODS:** Drug utilization and payment patterns were compared for six-month periods before and after the managed care program implementation. Medicaid clients in FFS, HMO, and PCCM programs in three other geographical areas across the state served as comparison groups (N = 54,061).

**RESULTS:** Significant differences (p < 0.001) across plan designs were found in the mean changes of the following variables between study periods for child and adult clients: 1) prescription drug use rates; 2) generic drug use; 3) prescription drug payments per claim; and 4) prescription drug payments per client. Furthermore, these changes were found to be significantly different across plan designs for child and adult antibiotic claims, and for child antidepressant claims. Significant differences were found for the following variables for child and adult antihistamine claims, and for child NSAID claims: 1) generic drug use; 2) prescription drug payments per claim; and 3) prescription drug payments per client. For adult antidepressant and NSAID claims, significant differences were found in the following variables: 1) prescription drug use rates; 2) generic drug use; and 3) prescription drug payments per client.

**CONCLUSION:** This study provided evidence of a managed care spillover effect on the prescription drug utilization of Medicaid managed care patients, despite the carved-out drug benefit. The results of this study should be helpful to Medicaid administrators who make decisions about managed care programs and carved-out drug benefits.

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**HORIZONTAL INEQUITY IN HEALTH CARE UTILIZATION IN JAPAN**

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**OBJECTIVE:** International comparisons of horizontal inequity in health have recently become one of the most pertinent issues in health economics. Japan has not been included in these international comparisons. This paper, focusing on Japan, rectifies this and considers its dynamics over six years from 1992 to 1998, which has never been considered in this field.

**METHODS:** We use the Comprehensive Survey of Living Standards in Japan (CSLSJ) for 1992, 1995, and 1998 so as to perform international comparison following Doorslaer and Wagstaff et al (JHE:2000). The sample size for each year exceeds 60,000. First of all, we regress outpatient utilization on age, gender, self-evaluation of health, and/or list of symptoms and define “Needs” as the predicted. Then, Kakuwani index between actual utilization and “Needs” is calculated.

**RESULTS:** In a rigorous international comparison, we cannot find any horizontal inequity in health in Japan. The point estimator is larger than Belgium and less than Canada, which means the smallest horizontal inequity in OECD countries. Moreover, it gradually changes from pro-rich to pro-poor, though this movement is not significant.