Abstracts

Direct cost estimates include medical expenditures, traffic costs and caregiver's cost. Indirect costs representing the loss of production include lost workdays due to illness and lost earnings due to premature death and are estimated based on human capital theory. The cost estimates are reported in USA Purchasing Power Parity Dollars and calculated at three different discount rates (0%, 3% and 5%). The major data sources are National Health Insurance Statistical Yearbook, Annual Report on the Cause of Death Statistics, and Survey Report on Wage Structure. We also use other information such as the Korean Statistical Information System. RESULTS: The cost of diseases in Korea in 2001 is 50.0 billion US PPP\$(\$ hereafter) based on 0% discount rate. The estimate represents approximately 6.6% of GDP or \$1627 per person. Direct and indirect costs are estimated at \$26.1 billion (52.2% of total cost) and \$23.9 billion (47.8%), respectively. And it is found that the cost at aged $40 \sim 49$ accounts for the largest proportion (22.2%) at age group and the cost of the male is 25.6% higher than that of the female. In the case of major diseases, the total cost of neoplasms is \$8.2 billion; \$7.4 billion in diseases of digestive system; \$6.5 billion in diseases of respiratory system; and \$5.9 billion in diseases of circulatory system. CONCLUSIONS: This study can be expected to provide valuable information for determining intervention and funding priorities, and planning for health policy.

HEALTH POLICY

HEALTH POLICY—Health Care Decision Studies

PEER PRESSURE IN HEALTH CARE

Lo IC

The Institute of Economics, Academia Sinica, Taiwan, Taipei, Taiwan **OBJECTIVES:** Past literature has shown that peer pressure shows significant effects on the probability that a young adult will commit a crime, a juvenile will start to smoke, a student will begin to study hard, etc. Almost all of the activities documented so far discuss the phenomena that one's behavior is influenced by others around him and has an impact on one's own self. However, in the health care field, if peer pressure among physicians does exist, then it has an impact not only on the physicians alone, but also on the patients as well. Therefore, this topic deserves special attention, but as far as we know, there has not been any related research. In this study we will investigate the impact of peer pressure on the cesarean-section decision. **METHODS:** Taiwan implemented its National Health Insurance (NHI) in 1995. It is a single-payer system with a pre-determined fee schedule. The health delivery system is a closed one with physicians being employed by hospitals, and a physician's income depends primarily upon the services he provides. A logistic model is employed, with 1 indicating that the delivery was performed by cesarean section, utilizing Taiwan's NHI in-patient claim data from 1997 to 2001. The average cesarean section rate of the fellow obstetricians in the same hospital for the previous month is treated as peer pressure. RESULTS: After taking into consideration the clinical indications, peer pressure shows a significant positive influence on an obstetrician's cesarean section decision. CONCLUSIONS: Whether the same phenomenon holds true for other types of care and for other type of health care system has yet to be explored. Nevertheless, strategies to eliminate its influence are necessary in order to provide a better quality of care.

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PHP9

RELATIONSHIP BETWEEN PATIENT-REPORTED READINESS, SELF-MANAGEMENT BEHAVIOR, AND HEALTH STATUS IN MANAGED-CARE PATIENTS WITH CHRONIC CONDITIONS Sankaranarayanan J, Mason HL

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OBJECTIVES: Practice-guidelines emphasize the importance of self-management in chronic conditions. Self-management education programs have proved cost-beneficial in randomized and observational studies worldwide. Empirical data considering the patients's readiness to adopt self-management behavior in chronic conditions are limited. Hence, the objective was to study patients' readiness to adopt self-management behavior in a managed-care setting. METHODS: A randomized crosssectional mail survey of 4730 enrollees from a central-Indiana (U.S.A) based health plan was undertaken (June-September 2003). Inclusion criteria: Adult patients, 18 years or older with at least one of four chronic conditions (asthma, diabetes, high cholesterol or hypertension) using ICD-9-CM codes. Patient readiness (TTMSM), derived from a patient-reported transtheoretical model-based staging-algorithm was the sum of the checked stage response (1 = pre-contemplation, 2 = contemplation, 3 = preparation, 4 = action or 5 = maintenance) for each of four 1-item self-management domains: participation with doctor; general self-management; lifestyle-management; and medical care. Statistical analyses used Spearman-rank correlation. **RESULTS:** Usable response rate: 12.9%, (n = 609). Respondents: Primarily female (61.8%), married (75.1%), white (97.3%), full-time employed (54.4%), education of high school or higher (94.8%), private insurance (72.4%), mean of 2 chronic conditions, 12-year mean disease-duration and \$35,000 or more income (62.1%). Though 84.7% reported satisfaction with care, 61.7% wanted different types of self-management advice. The mean patient readiness (TTMSM) was 16.1 (±2.7). Patient readiness (TTMSM) had significant associations with total number of chronic conditions (r = 0.10; p = 0.0122), a summated 22-item Self-Management Behavior Inventory score (SMBI-22) (r = 0.57; p < 0.0001), and satisfaction with care (r = 0.21; p < 0.0001), but not with maximum disease-duration or Short Form-12 health status scores [physical component summary, PCS; mental component summary, MCS] (p > 0.05). However, selfmanagement behavior (SMBI-22) had significant association with health status [PCS (r = 0.10; p = 0.0157), MCS (r = 0.14); p = 0.0004]. CONCLUSIONS: Patient reported readiness to adopt self-management behavior needs consideration as an independent factor in the development and effective delivery of selfmanagement education programs in managed care.

HEALTH POLICY

PHP8

HEALTH POLICY—Health Care Cost Studies

PHP10

EQUITY IN THE NATIONAL HEALTH INSURANCE DURING ECONOMIC RECESSION: MISSION IMPOSSIBLE? Lai MS¹, Lan CF², Huang SM³, Liang LY²

¹National Taiwan University, Taipei, Taiwan; ²National Yang-Ming University, Taipei, Taiwan; ³Department of Health, Taipei, Taiwan **OBJECTIVES:** The health care delivery system and personal income are two factors that affect equity in medical care. How deep is the impact of these two factors? We examine the impact of two related factors 1) the implementation of a compulsory National Health Insurance (NHI) program in 1995 and(2) the recession in 2001 on equity in health care finance and utilization in Taiwan. **METHODS:** We assumed that Burden of Health