

Provider payment incentives: international comparisons

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This issue of the *International Journal of Healthcare Finance and Economics* features eight articles evaluating different provider payment methods in comparative international perspective, with authors from Hungary, China, Thailand, the US, Switzerland, and Canada. These contributions illustrate how the array of incentives facing providers shapes their interpersonal, clinical, administrative, and investment decisions in ways that profoundly impact the performance of health care systems. Taken as a whole, the articles show that in addition to the specifics of the reimbursement or remuneration scheme for individual providers and provider organizations, other factors matter—including ownership, allocation of control rights (such as in public-private partnerships), and expectation of a bail-out (soft budget constraints). All of these facets of payment and accountability systems shape the quality and efficiency of service delivery.

The collection leads off with a study by János Kornai, one of the most prominent scholars of socialism and post-socialist transition, and the originator of the concept of the soft budget constraint. Kornai's paper examines the political economy of why soft budget constraints appear to be especially prevalent among health care providers, compared to other sectors of the economy. He gives examples from Hungary and Italy, and discusses a broad range of factors including government financing, patient moral hazard, provider altruism for patients and emphasis on new technologies, managers' political connections, and fiscal relations between central and local governments. Kornai concludes that the soft budget constraint phenomenon is not confined to socialist systems, post-socialist economies, or government-owned providers; rather, soft budget constraints inevitably develop in the hospital sector, even in capitalist market economies.

Two other papers in the issue take up the challenge of empirically identifying the extent of soft budget constraints among hospitals and their impact on safety net services,

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quality of care, and efficiency, in the United States¹ (Shen and Eggleston) and—even more preliminarily—in China (Eggleston and colleagues).

The impact of adopting National Health Insurance (NHI) and policies separating prescribing from dispensing are the subject of Kang-Hung Chang's article entitled "The healer or the druggist: Effects of two health care policies in Taiwan on elderly patients' choice between physician and pharmacist services." Pooling data from the 1993, 1996, and 1999 waves of a longitudinal survey of Taiwanese elderly, Chang estimates the difference-in-difference impact of NHI (1995) and the separation policy (phased in starting in 1997) on utilization of physician outpatient services and pharmacy visits, as well as self-assessed health. He finds that both policies increased elderly patients' physician visits, with evidence of substitution away from pharmacy use. Implementation of NHI also is associated with improved health for the previously uninsured elderly, whereas the separation policy is not associated with any health impact. The NHI results appear to be primarily the result of insurance lowering out-of-pocket costs of visiting doctors, relative to drug stores. Incentives on the supply side are deeply implicated in the second main result, however: that the separation policy decreased rather than increased visits to pharmacies is consistent with evidence that physicians acted on strong financial incentives to exploit loopholes in the policy (such as hiring on-site pharmacists) to retain drug dispensing revenues. Patients' aversion to travel costs also played a role.

In "Does your health care depend on how your insurer pays providers? Variation in utilization and outcomes in Thailand," Sanita Hirunrassamee of Chulalongkorn University and Sauwakon Ratanawijitrasin of Mahidol University study the impact of multiple provider payment methods in Thailand. They employ a creative study design featuring three conditions, three hospitals, and three insurance payment schemes to assess access to medicines and other medical technologies, treatment outcomes, and efficiency in resource use. Acute upper gastrointestinal bleeding, epilepsy, and lung cancer chemotherapy were chosen because these conditions can be clearly diagnosed, have noncontroversial guidelines, involve inpatient admission and drug therapy, and lead to relatively clear outcomes. The results provide striking evidence consistent with standard predictions of how payment incentives shape provider behavior. For example, patients whose insurers paid on a capitated or case basis (the 30 Baht and social security schemes) were less likely to receive new drugs than those for whom the insurer paid on a fee-for-service basis (civil servants). Patients with lung cancer were less likely to receive an MRI or a CT scan if payment involved supply-side cost sharing, compared to otherwise similar patients under fee-for-service.

The fourth paper in this special issue is entitled "Allocation of control rights and cooperation efficiency in public-private partnerships: Theory and evidence from the Chinese pharmaceutical industry." Zhe Zhang and her colleagues use a survey of 140 pharmaceutical firms in China to explore the relationships between firms' control rights within public-private partnerships and the firms' investments. Drugs firms in partnerships with governmental agencies or nonprofits can invest in public-spirited cooperation, but can also invest in using the partnership to further the firms' narrow profit objectives (such as by exploiting the partnership to market their own pharmaceuticals). Clearly most firms engage in a broad range of both activities. The authors use their survey data to test hypotheses derived from an incomplete contracting model of public-private partnerships with continuous control rights (drawing on

¹ That bail-outs potentially affect quality of care has received coverage in the US lately, reinforcing some of Kornai's hypotheses: "Hospitals are rarely closed or hit with significant financial penalties for hurting patients. One of the reasons is that even troubled hospitals are major employers, and communities generally rally behind them when they face the threat of cuts" (Alex Berenson, "Weak Oversight Lets Bad Hospitals Stay Open," *New York Times* December 8, 2008).

the literature on investments under incomplete contracts for both private and public goods). They find evidence in support of their proposition that firms' self-interested investments have a nonlinear relationship with the firms' control rights within the partnership. Given the growing importance of public-private partnerships in global health and health service delivery throughout developing and middle-income countries, additional research on these issues at the intersection of health economics and management science would seem of particular value.

Hai Fang, Hong Liu, and John A. Rizzo delve into another question of health service delivery design and accompanying supply-side incentives: requiring primary physician gatekeepers to monitor patient access to specialty care. Policymakers in countries considering adopting some form of gatekeeping, such as China, could benefit from expanded evidence on the impact of this common technique for constraining health care spending. Employing data from the Community Tracking Study physician surveys in the United States and using instrumental variables to correct for endogeneity of physician contracting with Health Maintenance Organizations (HMOs), Fang and colleagues estimate that HMO use of gatekeeping did not decline between the 2000–2001 and 2004–2005 periods. Greater physician involvement in HMOs leads to more gatekeeping, and this relationship continues despite the managed care backlash. The broader implications of trends in gatekeeping—including the overall welfare implications, balancing benefits and costs—remain important topics for future research.

Direct comparisons of payment incentives in two or more countries are rare. In “An economic analysis of payment for health care services: The United States and Switzerland compared,” Peter Zweifel and Ming Tai-Seale compare the nationwide uniform fee schedule for ambulatory medical services in Switzerland with the resource-based relative value scale in the United States. They use basic contract theory to assess whether the incentives of the two systems align with the stated goals of creating transparency, streamlining negotiations, and assuring “cost neutrality.” The authors emphasize that neither schedule incorporates payment for the ultimate objective, better health of the patient; and both reward specialists more than generalists despite a dearth of data on the effectiveness (and cost-effectiveness) of specialists compared to general practitioners. Payment uniformity also undercuts efforts to secure favorable contracts with flexible payment forms (such as innovations in bundled payment), a perhaps necessary feature if competition is to increase “value for money” in health service delivery.

Several of the papers featured in this special issue were presented at the conference “Provider Payment Incentives in the Asia-Pacific” convened November 7–8, 2008 at the China Center for Economic Research (CCER) at Peking University in Beijing. That conference was sponsored by the Asia Health Policy Program of the Shorenstein Asia-Pacific Research Center at Stanford University and CCER, with organizing team members from Stanford University, Peking University, and Seoul National University. The intent was to distill “best-practice” lessons from rigorous and policy-relevant evaluations of recent payment reforms in China and elsewhere in the Asia-Pacific. Policymakers from China's National Development and Reform Commission, Ministry of Health, and Ministry of Human Resources and Social Security spoke at the conference, and presenters came from Korea, Japan, Taiwan, Thailand, the Philippines, and the US. I acknowledge and thank my colleagues Li Ling of Peking University and Soonman Kwon of Seoul National University for assistance with the November 2008 conference, and the authors of this volume for agreeing to contribute their work to this special issue.

We hope that these papers will contribute to more intellectual effort on how provider payment reforms, carefully designed and rigorously evaluated, can improve “value for money” in health care.