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**A Review of Health  
Care Provider  
Payment Reform in  
Selected Countries in  
Asia and Latin  
America**

*August 1998*

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Partnerships  
for Health  
Reform

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Partnerships  
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## **Mission**

*The Partnerships for Health Reform (PHR) Project seeks to improve people's health in low- and middle-income countries by supporting health sector reforms that ensure equitable access to efficient, sustainable, quality health care services. In partnership with local stakeholders, PHR promotes an integrated approach to health reform and builds capacity in the following key areas:*

- ▲ better informed and more participatory policy processes in health sector reform;
- ▲ more equitable and sustainable health financing systems;
- ▲ improved incentives within health systems to encourage agents to use and deliver efficient and quality health services; and
- ▲ enhanced organization and management of health care systems and institutions to support specific health sector reforms.

*PHR advances knowledge and methodologies to develop, implement, and monitor health reforms and their impact, and promotes the exchange of information on critical health reform issues.*

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# Abstract

To explore opportunities for research and assist in research design, the Partnerships for Health Reform undertook the research for this report, which reviews the current status of provider payment reform in selected Asian and Latin American countries, as well as possible research questions and research approaches. Provider payment method, the mechanism for transferring financial resources from the payers of health services (the government, insurers, and/or patients) to the providers, influences providers' behavior (in terms of the types, amounts, and quality of services they offer) and financial performance. The research found that reforms in Asia are largely national level reforms affecting the whole of the social security system, reforms in Latin America tend to be less centrally driven and uniform.



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# Acronyms

<b>ARS</b>	Managers of the Subsidized Regime
<b>DRG</b>	Diagnosis Related Group
<b>EPS</b>	<i>Empresas Promotoras de Salud</i>
<b>FONASA</b>	<i>Fondo Nacional de Salud</i>
<b>FOSYGA</b>	<i>Fondo de Solidaridad y Garantía</i>
<b>GDP</b>	Gross Domestic Product
<b>GIS</b>	Government Insurance Scheme
<b>HMO</b>	Health Maintenance Organization
<b>Isapres</b>	<i>Instituciones de Salud Provisional</i>
<b>JPKM</b>	<i>Jaminan Pemeliharaan Kesehatan Masyarakat</i>
<b>LIS</b>	Labor Insurance Scheme
<b>MCH</b>	Maternal and Child Health
<b>NHI</b>	National Health Insurance
<b>OS</b>	<i>Obra Social</i>
<b>PAMI</b>	<i>Programa de Asistencia Medica Integral</i>
<b>PAS</b>	<i>Programa de Assistência de Saúde</i>
<b>PHR</b>	Partnerships for Health Reform
<b>RBRVS</b>	Resource-Based Relative Value Scale
<b>RHS</b>	Regional Health Service
<b>SNMN</b>	<i>Seguro Nacional de Maternidad y Niñez</i>
<b>SSS</b>	Social Security Scheme
<b>SUS</b>	<i>Sistema Único de Saúde</i>
<b>UBS</b>	<i>Unidade Básica de Saúde</i>
<b>USAID</b>	United States Agency for International Development
<b>UTE</b>	Enterprise Transitory Unit
<b>WCF</b>	Workman's Compensation Fund



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# Foreword

Part of the mission of the Partnerships in Health Reform Project (PHR) is to advance “knowledge and methodologies to develop, implement, and monitor health reforms and their impact.” This goal is addressed not only through PHR’s technical assistance work but also through its Applied Research program, designed to complement and support technical assistance activities.

The research topics that PHR is pursuing are those in which there is substantial interest on the part of policymakers, but only limited hard empirical evidence to guide policy makers and policy implementors. Currently researchers are investigating six main areas:

- ▲ Analyzing the process of health financing reform
- ▲ The impact of alternative provider payment systems
- ▲ Expanding coverage of priority services through the private sector
- ▲ Equity of health sector revenue generation and allocation patterns
- ▲ Impact of health sector reform on public sector health worker motivation
- ▲ Decentralization: local level priority setting and allocation
- ▲ Each major research project comprises multi-country studies. Such cross-country comparisons will cast light on the appropriateness and success of different reform strategies and policies in varying country contexts.

These working papers reflect the first phase of the research process. The papers are varied; they include literature reviews, conceptual papers, single country-case studies, and document reviews. None of the papers is a polished final product; rather, they are intended to further the research process—shedding further light on what seemed to be a promising avenue for research or exploring the literature around a particular issue. While they are written primarily to help guide the research team, they are also likely to be of interest to other researchers, or policymakers interested in particular issues or countries.

Ultimately, the working papers will contribute to more final and thorough pieces of research work emanating from the Applied Research program. The final reports will be disseminated by PHR Resource Center and via the PHR website.

Sara Bennett, Ph.D.  
Director, Applied Research Program  
Partnerships for Health Reform



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# 01. Introduction

Most developing country governments finance and provide health care for a significant proportion of their population. Government funding for public health centers and hospitals tends to be based upon historic budgets, thus defining a system with little accountability among health workers and managers and with few built-in incentives for efficiency gains in health services production. In addition, to improve equity in access, health care in public facilities has been offered free-of-charge, partly limiting the right of patients to demand timely, good quality service. Free care, and the associated inability to collect revenue from patients, have also reinforced the health workers' and managers' lack of incentive to improve output levels, quality, and input mix.

In the private sector of developing countries, financing for health services has been largely accomplished through a fee-for-service system. Health insurance has developed recently and slowly, generally constituting an option for only higher-income people, and while some health insurers have adopted alternative forms of payment, many continue to pay providers on a fee-for-service basis. Fee-for-service payment creates incentives for health care providers that may lead to cost escalation, growth in utilization, and price discrimination by health professionals. Health insurance may compound these problems by lowering or removing the out-of-pocket cost of consumption to the patient, thereby promoting greater demand and a rise in expenditure.

The provider payment system is central to the performance of both public and private health sectors. A provider payment method can be defined as a mechanism devised to transfer financial resources from the payers of health services (the government, insurers, patients) to the providers. Multiple provider payment methods exist and have been adopted around the world. Fixed budgets, where the provider periodically gets a set amount of money typically not tied to its output (as in the public sector of many developing countries), and fee-for-service, where the provider is paid a fee for each unit of medical output (as in the private sector), are two examples of commonly used payment methods. The existence of several other payment systems, and the feasibility of combining two or more of them, means that government and private payers face many choices for payment systems, and must select which method, or combination of methods, best responds to their objectives and fits within their constraints.

How providers behave, in terms of the types, amounts, and quality of services they offer, and how they perform, in terms of their finances, are phenomena that intimately depend on the kinds of payment systems in place. In fact, each payment method carries a set of explicit and implicit incentives that make providers—and consumers—behave in a variety of ways, leading to a broad range of possible results in terms of the kinds and volumes of services that are ultimately consumed. Barnum et al. (1995) discuss the behavior of health care providers and explore the incentives contained in the most common existing payment systems, including budgetary transfers, capitation, fee-for-service reimbursement, case-based reimbursement, and mixed systems. They also discuss administrative costs of different payment systems and institutional conditions required for successful implementation of new payment methods. The authors conclude that all payment mechanisms generate both adverse and beneficial incentives, and that mixed systems can help offset the disadvantages of individual methods. They also recommend that low-income countries,

with limited administrative capabilities, should avoid complex payment systems inconsistent with their human and institutional capacities.

Two payment systems which have been developed and become increasingly widespread over the past 10 to 15 years in industrialized countries are case-based and capitation payment. Under case-based payment, the provider is reimbursed a fixed amount of money for each medical case resolved (for example for each normal delivery), irrespective of the medical resources actually used to resolve each individual case. With capitation, the provider is paid a fixed periodic amount per person covered (for example, a set monthly amount for each person that belongs to a health insurance plan) also regardless of the amount of services actually rendered.

Developing countries have also started to experiment with capitation and case-based payment. For example, Thailand's Social Security Scheme reimburses public and private hospitals through capitation. Brazil's federal government, through its Unique Health System, has since 1985 adopted a mixed case-based, fee-for-service system to pay public and private health care providers nationwide. Argentina's *Obras Sociales*<sup>1</sup> and Program of Integrated Medical Assistance<sup>2</sup> have moved away from the practice of running their own medical services toward a system of contracts, most of them capitated, with a variety of intermediaries or directly with providers.

The Partnerships for Health Reform (PHR) Project is undertaking major applied research to study the impact of capitation and case-based provider payment on the performance of health care systems in developing countries. The recognized success of these two payment methods in industrialized countries in controlling the growth in health expenditures, improving health care quality, and boosting efficiency in hospitals and in ambulatory settings makes them particularly attractive targets for PHR research. In particular, in the developing country context very little is known about the impact of these two payment methods on health system performance.

PHR research on provider payment reform will be conducted in two countries in Latin America and one country in Asia. To explore opportunities for research, and to assist in research design, three separate reviews of reform experiences were undertaken by the project. Two of these papers, the review of Asian countries' experiences with provider payment reform by Winnie Yip and of provider payment reforms in Latin America by Ricardo Bitran are presented in this document. The third review, which focuses upon possible research questions and research approaches, is contained in a separate document.<sup>3</sup> Neither of the regional reviews presented in this document is comprehensive; instead, the reviews highlight those countries where the most radical

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<sup>1</sup>Obras Sociales are primarily health insurance entities. They finance health care from payroll taxes and manage health care benefits. They are owned by trade unions and provincial governments.

<sup>2</sup>The program that provides medical care for the Obra Social for Argentina's four million retired persons and pensioners.

<sup>3</sup>Maceira D. 1998. "Provider Payment Mechanism in Health Care: Incentives, Outcomes and Organizational Impact, Inputs for Research Agenda in Developing Countries." Working paper. Bethesda, Maryland: Partnerships for Health Reform Project, Abt Associates Inc.

reforms in provider payment have been made and which were thought to be fertile ground for country case studies.

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## 02. Provider Payment Methods and Reform in Asia

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### 2.1 Introduction

In Asia, many health systems have their origins in a British model, with predominantly publicly financed and provided care. This situation has changed a great deal in the past two decades, with most countries having a large and growing private sector, both in terms of financing and provision of care. Today there are three broad groupings of countries relevant to provider payment reform. The first consists of countries that have kept the original payment methods from colonial times, in which hospitals are paid by historical budgets, and physicians employed in the public hospitals are salaried, while those in private practice are reimbursed by the fee-for-service method. This group includes India, Malaysia, Sri Lanka, and probably Pakistan and Bangladesh. Since there is little provider payment reform under consideration in this group of countries, it will not be addressed in the literature review below.

A second group is made up of countries that have implemented some degree of social health insurance. These countries, which include Taiwan, Japan, Korea, and the Philippines, have adopted health financing systems which are closer to the Bismarck model. Their small-scale employer-based insurance schemes have gradually grown into universal coverage without the development of a substantial tax-financed delivery system. Cost inflation has driven some of these countries to consider provider payment reforms like volume controls for physicians (Taiwan) and global budgeting for hospitals (Korea, Taiwan).

The remaining group of Asian countries appears to be moving from a British model with public sector delivery and financing of care toward one based on social insurance. These countries, including Thailand, Indonesia, and Vietnam, have undertaken health financing reform as a result of broader economic transitions. As income grew, people became less satisfied by existing public services. Government funding limitations prevented the large facility improvements that would have satisfied the public, and therefore social insurance was seen as a way to mobilize resources and offer universal coverage to citizens. While contemplating reform in health financing, many also considered incentives to providers and altered their provider payment systems. China, although its health system was not initially based on a British model, is experiencing a similar transition. The changes in health financing coupled with rapid cost inflation, have led to consideration of provider payment reforms.

Singapore provides a somewhat unique example with the development of its Medisave program. While the principle of individual responsibility enshrined in the Medisave program is

interesting in terms of health finance, there is less interest in terms of provider payment and hence Singapore is not included in the review below. Payment for outpatient care in Singapore is still fee-for-service, but there are limits on payment per day for hospitalization and a maximum expenditure for each surgery

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## 2.2 Provider Payment Systems and Recent Reforms

### 2.2.1 China

This review focuses on urban China. Provider payment in urban China has primarily been based on fee-for-service. Before economic reform in 1978, public hospitals in China were financed largely by government budgets, and almost all physicians were hospital based, paid by a fixed salary. Patients were charged by fee-for-service according to a centrally planned national fee schedule. In order to ensure that medical services were affordable to even the poorest farmers, prices were set below cost. After the economic reform in 1978, partly because of reduced government revenue as a result of fiscal decentralization and partly because of the change in the ideology to reduce the government's role in the financing and provision of social services, government budget for hospitals was sharply reduced. By 1993, the government budget covered only 10–15 percent of total hospital expenditures. So that hospitals could generate enough revenue, they were allowed to charge above-cost prices for “new” procedures, which tend to be high-technology diagnostic procedures, to cross subsidize services that are priced below costs. As a result, providers have incentives to over-prescribe expensive, high-technology diagnostic procedures, leading to cost escalation. Most hospitals came to view high-technology equipment as their financial salvation. Some even required their staff to lend money to the hospitals to purchase the equipment, which in essence turned all their staff into bond holders of the equipment, the repayment of which depends on increased utilization of the equipment. At the same time, a bonus payment was introduced as part of the compensation for hospital-based physicians, with the bonus tied to service volume of procedures that bear a high profit margin.

A fee-for-service payment system coupled with a distorted fee schedule has been largely responsible for the rapid cost escalation experienced in China since 1978. Between 1978 and 1993, real health care expenditure increased at an annual rate of 11 percent. This rapid cost escalation has in part led to the fiscal crisis of the two major social insurance programs, prompting the government to search for new solutions.

Fifty percent of the urban population of China is covered by the Government Insurance Scheme (GIS) or the Labor Insurance Scheme (LIS). The GIS covers government employees, retirees, disabled veterans, university teachers, and students and is financed from government budgets. The LIS covers employees and retirees of state enterprises as well as their dependents. It is funded by a percentage (11–14 percent) of the enterprise's wage bill. In 1993 the GIS covered 9 percent of the urban population and LIS covered 40 percent. Neither scheme includes any cost sharing, which further exacerbates the fee-for-service payment system in leading to cost escalation.

As part of the effort to contain health care costs, China experimented with a new model of urban health insurance, patterned after the Singaporean model of Medical Savings Account.

Contrary to Singapore, China also introduced a prospective, fixed payment system. These reform models were first experimented in Zhenjiang city, Jiangsu province, and Jiujiang city, Jiangxi province, beginning December 1994. Packaged fees were set for outpatient visits and inpatient admission, and payment rates were prospective. Initially, the rates do not account for type of illness or severity, but do vary based on the level of facility. The providers can keep whatever part of the payment is in excess of the cost of treatment, but if they exceed the case payment they also must bear most of the financial risk. Beginning 1997, the two cities also introduced global budgets for hospitals, with growth rate capped at 22 percent annually and with limitations in the percentage of revenues constituted by drugs.

Preliminary evidence shows successful cost containment occurring (Yip and Hsiao, 1997). Real per capita health expenditure fell substantially, and there is reduction in length of stay and prescription of expensive diagnostic tests. Based on the early experience of success, the Chinese government has decided to expand these experiments to 38 other cities. However, there is anecdotal evidence that the prospective case-based payment method has led to risk selection and under-provision of services, hence potentially threatening the quality of care. Moreover, there is also anecdotal evidence which shows that providers cost shift to the population who still pay on a fee-for-service basis, i.e., the uninsured population.

In some of the 38 reform cities, while case-based reimbursement is contemplated for inpatient services, a capitation payment system is used for outpatient services. Besides these state-mandated experiments, many cities in China have also been carrying out locally initiated experiments. Haikou city in Hainan province reformed its social insurance programs using the Medical Savings Account model in 1994. The model also combines an Oregon approach on the benefit side, and diagnosis related group (DRG)-type payment system. In the beginning, a list of 194 diagnosis related groups were formed for provider payment purposes, which was extended to 414 groups in 1997. Empirical evidence on the impact of this reform model is limited as no scientific evaluation has occurred.

Another local experiment, in Shanghai, had a different objective. Because of a 53 percent increase in hospital costs from 1993 to 1994, Shanghai instituted a global hospital budget system. Hospital costs were permitted to increase no more than 24 percent, and drugs were held to a 15 percent maximum increase. Fees for visits and surgeries were reduced to align them with the labor costs involved, and fees for MRI and CT services were reduced by 12 to 15 percent. These efforts were successful in keeping the annual increase for 1994–1995 in the target range.

### **2.2.2 Indonesia**

Until 1997 Indonesia had experienced phenomenal economic growth. At the same time the government health budget was quite severely constrained. Current public health expenditures are estimated to be only 0.8 percent of gross domestic product (GDP) and this percentage is unlikely to increase in the next decade. This forces the government to seek alternative methods of mobilizing resources for financing health care. Studies conducted by the Ministry of Health, in collaboration with the World Bank, indicated that the government financed 30 percent of total health expenditure, implying that the private sector is already playing a major role in health care financing. The government aims to look for methods to better organize resources and to develop a managed care type of health insurance plan.

As early as 1987, Indonesia was experimenting with provider payment methods. Several of the most interesting experiences relate to the payment of individual staff members, particularly physicians. As a part of the reform of civil servants compensation, public hospital physicians' compensation was tied to performance to encourage professional excellence and entice physicians to spend more time in their public as opposed to private practices. The bonus system did not take time and effort input into account, but instead relied on quantity of services. The rewards, amounting to less than 10 percent of average total income, were deemed insufficient to motivate behavior. This assessment was based on a survey of 200 community physicians (Chernichovsky and Bayulken, 1995). It appears however that this reform has not been continued.

In 1990, the dilemma facing the Health Department was doctors complaining about having to serve in remote and difficult areas, in return for low salaries. At the same time, doctors continued to want the security of "lifetime tenure," a pension, as well as the established guarantees of advancement inherent in the public service. Consequently, reforms were introduced whereby medical graduates would no longer be obligated to join the public service, but encouraged to take "temporary" service posts in *Puskesmas* (community health centers), with salaries being determined by the degree of isolation and difficulty faced. A "semi-negotiable" package was mandated to ensure fairness across the system and to prevent extreme levels of salary in either direction.

When the first 1,000 doctors finished their contracts in 1995, there were not enough opportunities to absorb them into government positions. To address this, a project was undertaken in several places to train them to become family doctors and serve a population of certain size (e.g., one district) under a prepayment scheme. This prepayment scheme, known as *Jaminan Pemeliharaan Kesehatan Masyarakat* (JPKM), is described below.

The national health strategy was established in National Health Law No. 23 of 1992, which established JPKM managed care. JPKM is defined as a means to deliver health care services with the following features:

- ▲ cost containment through capitation and risk sharing
- ▲ equity by offering a basic benefit package
- ▲ quality assurance by provider contracting, standard procedures for service, consumer service, and quality management

The objective is eventually to provide all Indonesians with a basic benefits package (regardless of ability to pay) through competition between managed care plans. Services covered include preventive services, primary and specialist walk-in care and limited hospitalization benefits. These plans are free to provide additional benefits at additional costs. The public and private providers who participate in the network are paid on a capitated basis.

The four types of JPKM organizations are Pt. ASKES for government employees, Pt. ASTEK for formal sector employees, Dana sehat for the population not covered by Pt. ASKES or Pt.

ASTEK, and private JPKM. Except for Pt. ASKES and Pt. ASTEK (both of which are social insurance schemes), all participation in JPKM is voluntary.

Evaluation of pilot schemes to cover the rural population in the early 1990s highlighted serious difficulties in collecting premiums, as well as significant administrative and management obstacles (Hull and Hull, 1995). In addition, it is hypothesized that those covered by JPKM may increase use, while those not covered may maintain their level of use, thus resulting in a more inequitable situation. The fact that JPKM plans reimburse public providers at heavily subsidized prices will render the private sector uncompetitive for JPKM business. Reimbursing at unit full cost will have the negative effect of raising cost, which will in turn discourage enrollment. Some thought has also been given to possible consumer copayments that would enable them to use private primary care. Other weaknesses of the program include adverse selection that arises from voluntary enrollment, and risk selection and difficulties in collecting premiums when marketing to individuals, as opposed to groups.

### **2.2.3 Japan**

From the depths of destruction of World War II, Japan as a nation has achieved phenomenal improvements in health status with a relatively low level of national health expenditure. Nonetheless, the Japanese health care system is plagued with two major problems, the first of which is financing. In the past, Japan maintained a stable health care cost to GDP ratio, an accomplishment marred only by the fact that GDP was experiencing continuous growth during the period prior to the 1980s. The boom years ended in the 1980s but health care costs continued to increase. The second challenge is improving the quality of service delivery.

Japan has a social health insurance system that pays providers based on a uniform fee schedule set through political negotiation. In 1977, the Japanese government became very concerned about medical care cost inflation. The growth in medical expenditures had outpaced overall growth of the economy for the better part of the preceding 15 years. In response, the government decided to impose a global budget on the Japanese health sector such that its growth did not exceed the growth of the economy. In 1982, the government established the Organization for Comprehensive Measures for Rationalizing Medical Care Expenditures to implement the guiding principles. The Central Social Medical Care Council set the fees as well as the limit to the growth in medical expenditures (equal to the expected growth rate of the economy). These efforts seem to have reduced the rate of health expenditure increase to close to inflation in Japan (Gunji, 1995; Ikegami, 1991). There has been an ongoing revision of the fee schedule, including the recent effort to institute a Resource-Based Relative Value Scale (RBRVS) for setting the point system of the fee schedule. However, there has been no discussion of introducing case based reimbursement or capitation payment method so far.

There are essentially only two types of health care providers, the office-based doctors (more than 90 percent are private) and hospitals (80 percent private). Public sector and university hospitals receive direct subsidies from the government. The same fee schedule applies to both private practice doctors and hospitals. The fee-for-service system has resulted in excessive provision of certain services such as drugs and laboratory tests. As doctors usually dispense their prescribed medication, they have the incentive to overprescribe or prescribe drugs with higher

profit margins. In addition, the fee-for-service system creates incentives for physicians to see more patients and hence has a distorting effect on patient volume. The lack of functional differences between office-based doctors (who tend to specialize) and hospitals, combined with the resultant absence of effective gatekeeping, has led to overcrowding, long waiting times, and short consultation times in university and other large hospitals.

The combination of the incentives created by a fee-for-service system and the aging of the population has resulted in over-treatment of geriatrics which has been described as one of the major causes of cost escalation. To control this, the government introduced a scheme in 1990 whereby a hospital with a high proportion of geriatric patients which meets the standards of staffing, is allowed to opt for a new payment scheme of inclusive per diem payment.

#### **2.2.4 Korea**

Korean health care has traditionally been a private sector dominated system with about 85 percent of hospitals and virtually all clinics privately owned. Compulsory health insurance was introduced in 1977 and achieved universal coverage in July 1989. The National Health Insurance (NHI) is divided into Medical Aid for the indigent and Medical Insurance for the working population. Medical services are provided indirectly (not by insurers). Providers are reimbursed through a fee-for-service according to a national fee schedule. A committee of the National Federation of Medical Insurance reviews item by item all claims submitted by providers, and reimburses them with the adjusted amount. For services covered by insurance, part of the remuneration received by providers comes from insurance funds and the balance by patient's out-of-pocket payments. Each service utilization has cost-sharing features, namely, a deductible and co-insurance. Despite expansion of NHI coverage, household out-of-pocket payments still account for over 60 percent of total health expenditure.

For services that are not covered by the NHI, providers are free to charge market rates. As a result, there is abusive use of procedures that are not covered by NHI, notably high-technology diagnostic procedures. Charges for these services are 300 percent to 600 percent of estimated costs for the services studied (Berman, 1997). Despite demand side cost control mechanisms, Korea experienced rapid cost escalation (Yang, 1991). Drug consumption, largely unregulated and stimulated by private provider incentives, has kept pace with increased spending and accounts for about 30 percent of total health expenditure. The financial burden of uncovered services may be greater for lower-income families than for better-off families.

In 1994, health care reform was introduced with the overall objectives of ensuring that each person has access to a comprehensive package of high-quality services produced in the most efficient way, and for payment to be fair.

Prior to reform, physicians at hospitals were paid salaries, and occasionally paid bonuses based on their performance. The government plans to gradually replace the current fee-for-service schedule with a prospective payment system using DRGs for inpatient services and a RBRVS for ambulatory care services. An experiment with a case payment structure began in late 1995 (the first time a payment structure other than fee-for-service has been tried in Korea). It has been introduced only on an experimental and voluntary basis because of political resistance. No

systematic evaluation for the impact of DRG on provider behavior has been performed in Korea, although casual observation does not indicate substantive changes (communication with Professor Yang Bong-ming). A significant issue that needs to be addressed for evaluating the DRG payment system in Korea would be the correcting for biased selection of hospitals in the experiment. Because of the voluntary nature of the DRG experiment, the hospitals that chose to participate tended to be those experiencing financial difficulties. Perhaps in a more representative sample of hospitals, the change to DRG payment would have a different impact.

### **2.2.5 The Philippines**

In 1991, total national health expenditure in the Philippines represented about 2.3 percent of the gross national product. Major sources of financing include the government (44 percent), social insurance namely Medicare and Employees Compensation (12 percent), household out-of-pocket payments (38 percent), health maintenance organizations (HMO), and private insurance (6 percent). The Medicare Program is a compulsory insurance program established by law in 1969 and implemented in 1972. The objective of Medicare was gradually to provide the entire population with viable opportunities for helping themselves to pay for adequate medical care. As of 1991, Medicare was estimated to have covered about 26 million members and dependents representing 42 percent of the total population. The National Health Insurance Act of 1995 established the National Insurance Program in 1996, which expanded the current Medicare Program to cover the entire population of the country. The key feature of this program is the coverage of indigents, whose premiums will be subsidized by the central and local governments.

The Philippines retained a fee-for-service system under first dollar insurance coverage of the Medicare program. Some authors have criticized this system as providing little catastrophic coverage but merely adding to the incomes of providers (Gertler and Solon, 1996). Medicare reimbursements are made directly to the provider whereby the level of compensation for professional services is based on whether hospitalization is surgical or non-surgical in nature. Surgeons are paid on a scale developed by the Philippine Medical Care Commission while anesthesiologists earn one-third of the surgeon rate. Non-surgeons receive a fixed amount per day with accredited specialists compensated at higher rates than general practitioners. Pressure from increasing demand and production costs will raise health care prices. If absolute level of coverage remains the same, the insured will have to pay more out-of-pocket. However, increases in Medicare benefits may drive up health care prices further.

To counter incentives to over-prescribe due to fee-for-service reimbursement, Medicare imposes maximum expenditure allowances depending on the type of service and category of hospital. In addition, the Philippine Medical Care Commission maintains a priority list of high-risk hospitals and has instituted a regular system of hospital monitoring. No reform on provider payment is planned.

## 2.2.6 Taiwan

Before the implementation of the National Health Insurance program in 1995, there were three major social insurance schemes, and their payment methods were all based on fee-for-service according to a fee schedule (Liu, 1997). Rapidly inflating costs, an increasing number of elderly, a chaotic situation of insurance and medical care, and political pressure contributed to the necessity of the NHI. At its inception, the original Labor Insurance fee schedule was adopted (Chiang, 1997; Lo, 1995.) Participation in the program is mandatory under the NHI Law.

Concerns about health care cost inflation have prompted the government to contemplate provider payment reform (Liu, 1997). Several payment reform strategies include (Lee, 1997):

- ▲ Development of case payment system, including DRGs for inpatient, Ambulatory Patient Groups for outpatient, and Resource Utilization Groups for home care;
- ▲ Revision of the current fee schedule along the lines of the RBRVS as developed in the United States;
- ▲ Introduction of an essential drug list and revision of drug prices so as to properly reflect cost of production. Similar policies were also recommended for medical devices;
- ▲ Introduction of global budgets in the short run and capitation in the long run.

The Department of Health has developed and experimented with case-based prospective payment methods for certain diagnoses, including normal deliveries and cesarean sections. The payment rate includes medical consultation, nursing, ward charges, costs of the procedure, and drugs. While this payment is similar to the DRG system in the United States, the number of groups per diagnosis is smaller. In the United States, there are four DRGs for cesarian sections, compared with one in Taiwan. Preliminary analysis showed that both the length of stay and cost per admission for cesarean sections have fallen after the first six months of implementation of the case based payment (Lee, 1997). Case-based reimbursement is planned to be expanded to other surgical procedures this year, notably appendectomy, hernia repair, total knee/hip replacement, CABG (Coronary Artery Bypass Graft), and cholecystectomy.

To reduce the resistance from the providers, the rate of payment was recommended to be set based on a “budget-neutral” principle, unless the Fee Schedules were seriously distorted (Lee, 1997). Under this principle, the amount of payment for each case would be determined based on statistical analysis of historical claim data. However the payment rates agreed for different cases implied some redistribution of resources between different types of physicians: broadly speaking, primary care physicians became better off under the proposed system and surgeons were adversely affected, while the position of other types of physician remained unaffected. This redistribution naturally created resistance and opposition from those groups (primarily hospital-based doctors) who would lose out under the reforms. The situation became worse when many hospitals replaced fixed salary systems for physicians with salary-plus-bonus or even physician fee system. According to the Bureau of National Health Insurance, the number of physicians in hospitals decreased by 3.6 percent and 4 percent in 1995 and 1996 respectively and increased by 6.4 percent and 5.7 percent in the primary care sector for the same period. Major revisions on fees for ancillary services started only in July 1996, the first step toward equitable payment.

Taiwan is also using volume controls for the services covered by fee-for-service. Physicians are reimbursed fully for the first 30 visits daily, but as the number of visits per day increases they are paid less per visit. The amount paid for 150 visits per day is half of the full rate (Liu, 1997).

## 2.2.7 Thailand

Among all Asian countries, Thailand has the greatest variety of provider payment methods. Each insurance plan reimburses its providers using a different mechanism, as illustrated in Table 1.

<b>Health Coverage Plan</b>	<b>Date Instituted</b>	<b>Coverage %</b>	<b>Provider Payment Method</b>
Civil servant	1980	11	fee-for-service
Social security	1990	9	capitation
Workman's compensation	1973	5	fee-for-service
Health cards	1983	5	capitation and budget
Private insurance	1978	1	fee-for-service
Free care	1975	21	historical budget

The Civil Servant Medical Benefit Scheme is financed by government revenue. It covers civil servants, pensioners, and their dependents for all outpatient and inpatient services in the public sector. Partial coverage is also included for inpatient private hospital use. Providers are reimbursed by fee-for-service. This is recognized as being a poor control over utilization, and experience indicates that hospitals cross subsidize the costs of care for those with less generous payment plans. The Civil Servant Medical Benefit Scheme has the highest expenditure per capita at more than 900 baht per person covered.

The Social Security Scheme (SSS) is a compulsory scheme that covers employees in firms with more than 10 workers and is funded by tripartite contribution from the government, the employer and the employee, each contributing 1.5 percent of the wages. Both public and private health care providers can enter this scheme providing they meet certain standards set by the Medical Committee. Contracted hospitals are paid by capitation, at a rate of 900 baht per worker per year. All outpatient and inpatient services at the contracted hospitals are covered by the scheme (Hsiao, 1993). As the capitation payment received by hospitals covers the entire range of services from primary to tertiary care, it has been hypothesized that hospitals will increase the use of preventive and primary services in treating their patients and reduce unnecessary or expensive

services. A recent change in this scheme is that employees can now choose their provider whereas in the past, providers were chosen by the employer.

The Workman's Compensation Fund (WCF) covers the same population as the SSS for work-related illness or injury. The fund is financed by a ceiling of 2 percent payroll taxation contributions from employees. Workers have free choice of public or private hospitals and the fund pays hospitals on a fee-for-service basis with a maximum of 30,000 baht ceiling for each episode (Hsiao, 1993). This ceiling in most cases proves to be non-binding (Bennett, 1992).

Hence, the SSS and WCF extend complementary benefits to the same population group but use different payment mechanisms. Such diverse and fragmented approaches to providing health benefits create inefficiencies and inequities among the 59 percent of population covered by some benefit scheme, as well as between those covered and the remaining 41 percent not covered by any scheme. For example, there is anecdotal evidence of case shifting from SSS coverage to WCF coverage for the same episode of illness because of more generous benefits under WCF.

Beginning in 1983, the health card system was initially a community-based financing scheme covering eight episodes of curative care per year, with a maximum of 2,000 baht per episode. These limits were later waived during a reconfiguration of the program. By 1987/88, the program was expanded, increasing the premium from 300 baht per household to 500 baht per household. Since 1994, the health card program has had an equal matching fund of 500 baht per card from the government. Patients were allowed to choose their first point of service contact, and no cap was put on utilization levels. The program was also renamed the Voluntary Health Insurance Project, and the support for continuation of this program has been mixed. Originally conceived as a primary health care initiative, it has now evolved into a fully functional risk-sharing prepayment system for health and medical care. The program is decentralized, allowing for flexibility for each province to determine pricing, the degree and types of benefits covered, as well as management of funds. Approximately 70 percent of the health card fund is designated to fund providers at different levels. Studies reveal that this covers around three-fourths of direct treatment costs, the remainder of which is subsidized by the hospital's other sources of revenue.

The Ministry of Health's low-income card scheme, which households apply for, exempts poor households from fees at public facilities on condition that they observe the referral system. The free card budget is distributed among provinces based on the numbers of low-income users of health services in previous years. It covers only about half the cost of care to the facilities, with the remainder to be made up by cross subsidization from insured patients (primarily the Civil Servant Medical Benefit Scheme) and the regular government budget (Hsiao, 1993). Relatively high levels of out-of-pocket expenditure has been observed amongst underprivileged households (Pannarunothai and Mills, 1997) reflecting the fact that patients appear to be willing to pay for private sector care even when they are eligible for free public sector care.

There is a wide income differential between public and private sector wages for physicians, resulting in an outflow of physicians, nurses and other health care providers from the public to the private sector. The majority of those who work in the public sector also work part-time at private clinics. The Ministry of Public Health has granted a 10,000 baht monthly allowance for physicians who elect to work only for the public sector.

### 2.2.8 Vietnam

The radical changes taking place in the structure and operation of collective farming since the 1980s, resulting in the widespread abandonment of the cooperative system in the 1990s, has had profound implications for the health system of Vietnam.

In 1992, a system of health insurance in Vietnam was officially introduced following a government decree which described a system of compulsory payroll-based health insurance for all government employees and employees of state and private enterprises with more than 10 workers. Introduction followed in a number of pilot schemes that took place around the country for periods of one to four years. At the same time, a system of voluntary insurance for workers in small businesses and agricultural employment was also introduced.

The central government budget is the source for all health personnel salaries at the central and provincial levels, as well as a portion of those at the district level. According to the decree, provincial insurance offices must contract with hospitals to provide care. Early pilot schemes relied on fee-for-service, based on treatment complexity and number of days in hospitals. Fees were set in advance but no constraint was placed upon volume of work, except for a limit of 10 days on hospitalizations. Some cost inflation was reported and monitoring of appropriateness of procedures, including the publication of treatment outlines for 400 diseases, was introduced. Provinces at the forefront of the changes were the pilot sites. They varied in terms of payment methods. For example, Haiphong began its compulsory insurance scheme in 1989, and has been using fee-for-service for reimbursement. In Quang Nam Da Nang, the scheme is voluntary, but insurance offices develop volume contracts with hospitals, specifying the number of patient days to be completed annually and an average cost per day. Hospitals must account for the cost of each case but monthly reimbursement for treatment given should not exceed this indicative amount. Hospitals are allowed to keep any surplus (Ensor, 1995).



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## 03. Provider Payment Reform in Latin America

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### 3.1 Introduction

Although several countries in the Latin American region appear to have initiated reform in provider payment systems, this review focuses on those whose reforms seem to be most relevant to PHR's research objectives; they are Argentina, Bolivia, Brazil, Chile, and Colombia. These countries have adopted or are in the process of adopting case-based or capitation payment systems. Reportedly Uruguay also has relevant experience in the domain of provider payment, but it was not possible to obtain information about it.

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### 3.2 Recent Reforms and Provider Payment

#### 3.2.1 Argentina

Argentina has a complex health care system, where public and private financing and provision coexist in a variety of forms. Union-owned health insurance entities, created during the first Perón government in the early fifties and known as Obras Sociales (OS), provide health insurance to about 40 percent of the country's population; private HMO-like insurers, referred to as prepagas, cover between 10 and 15 percent of Argentineans. There are also province-owned OSs that insure civil servants at the provincial level. Between 30 and 40 percent of the population, mostly low-income individuals, is not covered by any health insurance system but is entitled to free health care in public facilities.

Public health facilities are operated by the provincial governments under a decentralized health system. The private health delivery sector is well developed with hundreds of clinics operating around the country and offering sophisticated and, in places, top quality health care. Argentina has one of the highest supplies of doctors per capita in the world, and health expenditure has grown considerably over the last two decades, although health status has not improved accordingly.

Argentina has long experience in provider payment innovation. The Program of Integrated Medical Assistance (*Programa de Asistencia Medical Integral*, PAMI), which provides health care to the gigantic Obra Social that covers four million retired and disabled Argentineans, spends about US\$1,000 per beneficiary annually, a relatively high amount in a country with a per capita gross national product of US\$8,500 in 1996. PAMI provides health care to its beneficiaries through an array of providers with which it establishes a variety of contracts, from capitation, to fee-for-service, to case-based payment.

Until the mid- to late eighties, some OSs operated their own health services. Today, OSs primarily purchase health services either directly from providers or, more recently, through intermediaries known as Enterprise Transitory Units (UTE). UTEs typically buy health services from multiple providers and make up a package of care that is within the budget constraint of the client OSs they serve. Fee-for-service used to be the main mode of health services purchasing by OSs. This has now been replaced by capitation, where the OS makes a fixed payment to the UTE in exchange for comprehensive health care coverage of each OS beneficiary.

Around 1994 Argentina's Ministry of Health, under a World Bank-financed project, started an initiative aimed at promoting decentralized management and financing of public hospitals at the provincial level. The project, known as *Hospital de Autogestión* (Self-Managed Public Hospital), promoted more aggressive cost recovery by public hospitals, particularly from OSs that up until then were heavily using, but generally not paying for, health care in public hospitals. It is presumed that public hospitals now recover an increasing share of costs from OSs.

Reform of the OS system also started in 1996 under a World Bank-financed Ministry of Health project. Until that year, over 300 OSs of considerable difference in size and resources operated around the country. No mobility of beneficiaries among OSs was possible, as each beneficiary had to stay within the OS of his or her own union. The reform sought to change this in order to promote greater competition among OSs.

In just over a year since the reform started, several mergers have taken place among OSs, and their number has dropped to fewer than 100. Reportedly, the larger and more competitive OSs are developing new relationships with health care providers including new provider payment systems such as capitation. No study has been undertaken about these new systems, and the impact that they may have on quality of care, beneficiary satisfaction, access to services, and health care spending by OSs is not known.

Despite the above changes, fee-for-service payment has not disappeared from Argentina's health system. In fact, *prepagas*, the private health insurers, operate predominantly on a fee-for-service basis with their medical providers.

In sum, Argentina has experienced significant reform in provider payment systems. OSs have moved from fee-for-service or from own production of services to the purchasing of care, mostly on a capitated basis; and public hospitals are now more aggressively charging third-party payers for services provided to their beneficiaries.

### **3.2.2 Bolivia**

In mid-1996 Bolivia implemented the Maternal and Child Health Insurance (*Seguro Nacional de Maternidad y Niñez*, SNMN,) Program. SNMN consists of the delivery of a basic package of about a dozen maternal and child health (MCH) care interventions that are offered at the municipal level in public hospitals, health centers, and health posts with central government funding.

SNMN is an innovative policy for several reasons. First, it is based on the delivery of a modest, and therefore realistic, basic package of MCH interventions. Second, it is inserted within a decentralized framework. Each month the central government, under the population participation law enacted in 1994, allocates funds to the municipalities for investments and recurrent costs of social programs, and for other investments (e.g., road construction). It specifically earmarks funds to pay for social programs in each municipality, based on a capitated mechanism that assigns a fixed amount of money on the basis of the population of each municipality. Third, SNMN health services can be obtained from both Ministry of Health and Social Security providers. Fourth, SNMN services must be offered free of charge to all mothers and children. Once a month health care providers in the SNMN must bill the local departmental office charged with administering the insurance program, for services provided under the insurance program; billing is done on the basis of a price schedule defined by the central health authority.

There exists detailed central level statistics on health services utilization, billing, and financial balance in each of the country's municipalities under SNMN.

The PHR project is in the process of finalizing an extensive evaluation of the SNMN program in 10 of the 311 municipalities. The evaluation assesses three aspects of the program including cost, utilization and quality, and administrative capacity. The government of Bolivia plans to expand the insurance program in order to cover both a wider population as well as a larger number of health care providers.

### **3.2.3 Brazil**

Two policy reforms that have taken place over the past 15 years in Brazil offer good prospects for research on provider payment reform impact. The first is the adoption of a mixed case-based, fee-for-service system under the federal Unique Health System (*Sistema Único de Saúde*, SUS) health program by 1985. The second is the Health Assistance Program (*Programa de Assistência de Saúde*, PAS) recently implemented in the city of São Paulo. These two initiatives, and related potential research topics, are described below.

#### **3.2.3.1 The SUS Provider Reimbursement System**

Brazil possesses a decentralized health system that is unique in Latin America. Through SUS the federal government channels public health subsidies. Provision of health services is in the hands of public and private (both for-profit and not-for-profit) providers, most of whom participate in SUS. SUS participation means that providers offer health services free of charge to the general population and submit monthly bills to SUS for the care provided.

Evidence indicates that consumption rates of cost-effective health services in Brazil are low. A larger-than-optimal share of the federal health budget spent through the SUS provider reimbursement system pays for personal health services that are cost-ineffective. During a World Bank/Inter-American Development Bank mission in mid-1996, mission members argued that provider reimbursement rates could be altered to promote more provision of cost-effective health services and less consumption of services of low cost-effectiveness.

Reportedly, the fact that SUS rates have not caught up with increases in health care costs over time has driven some private for-profit health care providers away from the SUS system, toward the more lucrative private health insurance market. Nevertheless, for-profit providers still deliver a substantial share of SUS services, and account for an equally important share of SUS reimbursement. At the national level, for-profit providers deliver 41 percent of all hospital care, followed by private non-profit providers with 32 percent and by public hospitals with 17 percent. These percentages closely follow those for hospital reimbursement under SUS. For ambulatory care, however, the situation is different: for-profit providers account for only one-fifth of all ambulatory services delivered under SUS, or about as much as non-profit providers, while public providers deliver 57 percent of SUS care. Unlike inpatient care, provider reimbursement shares for ambulatory services do not match output shares. Thus, public providers, who deliver 57 percent of SUS ambulatory services, capture only 27 percent of SUS reimbursement. This suggests that public providers focus on inexpensive ambulatory services—primarily preventive and some types of primary care—while for-profit, non-profit, and university facilities deliver more expensive ambulatory services (ones with unit reimbursement rates about four times as high as those delivered in public facilities).

Reportedly, SUS relative reimbursement rates have not been altered significantly in recent years. In addition, no evaluation has been undertaken of the impact that relative rate changes have over time over the supply of specific health services by different categories of providers.

### **3.2.3.2 The PAS Initiative in São Paulo**

In the early 1990s, analysts and policymakers in the city of São Paulo started discussions about options to reform the city's health care system, in response to multiple problems in quality of care, access, spending, and health professionals' work dissatisfaction. The idea of setting up a competitive set of networks of public and private providers that would sell their services to the city of São Paulo was advanced by some analysts.

In 1994 the Health Assistance Program was started, although with a somewhat different design from the original proposal: only public providers were included in the network that would sell services to the city. Each network, known as a Basic Health Unit (*Unidade Básica de Saúde*, UBS), consists of several public health centers and one or more public hospitals. UBSs are actually health management units that are free to determine the set of providers from which they will purchase services, the personnel with which they will operate, and the mechanisms they will adopt to control costs. UBSs are organized as cooperatives of health care providers. Their health workers therefore are no longer government employees (they must take a leave from their government posts to join a UBS) but rather are members of the cooperative, and their income thus no longer comes in the form of a fixed salary but instead is tied to the cooperative's performance. Financing of the UBS is via a monthly city-paid capitation per beneficiary enrolled, and financing comes from SUS and other city resources. Cost savings by the UBS translate into better compensation for its workers. The population is free to enroll in any UBS and obtains a UBS beneficiary identification card. Health services are free of charge to the beneficiaries (as mandated by the constitution).

The performance of PAS has not been evaluated, although PAS management is believed to keep detailed records of health services utilization and expenditure. Based on data of PAS management, it appears likely that utilization of ambulatory services in São Paulo municipality has increased dramatically since PAS started; health expenditure also seems to have grown.

### 3.2.4 Chile

Since 1981 Chile's formal sector workers must by law devote 7 percent of their monthly salary to pay for health insurance, being free to choose between public or private insurance. Private health insurance firms that are financed with the mandatory payroll contribution are called Isapres (*Instituciones de Salud Previsional*, or Providence Health Institutions). About 25 open Isapres operate in Chile and insure 25 percent of the country's population, or 3.5 million people. Several closed Isapres, owned by large firms, also operate, but they cover only the employees of their respective firm and their dependents. Their coverage is only a very small percentage of Chile's population.

There is a single public health insurer in the country, called the National Health Fund (*Fondo Nacional de Salud*, FONASA). FONASA is the government's health financing agency that pays for the provision of public health goods and the investments and operations of public hospitals and municipal health centers. About one-half of FONASA's revenue comes from the public treasury, while the other half comes primarily from the 7 percent payroll contributions made by FONASA beneficiaries. It is estimated that approximately 50 percent of FONASA's beneficiaries are indigent persons who do not make any financial contributions to FONASA but who are entitled to obtain care free of charge in public hospitals. The remaining half of the beneficiaries do make their monthly payroll contribution to FONASA and also make income-based copayments when obtaining care in public hospitals.

In principle, primary health care offered in municipal health centers is free for all FONASA beneficiaries while non-beneficiaries—the majority of whom are middle- to higher-income individuals covered by Isapres—should pay fees in municipal facilities. In practice, demand for municipal care is small among non-beneficiaries of FONASA.

Until recently, FONASA financed each of the 27 public regional health services (RHSs) through the traditional method of adjusted historical budgets. An RHS consists of an administrative and technical office, under which operate up to 20 public hospitals. Three years ago, FONASA developed a mixed case-based, fee-for-service system to transfer government health subsidies to the RHSs. Although the new system is not yet fully operational, FONASA's transfers have been adjusted progressively to more closely remunerate RHSs for what their hospitals actually produce. Each RHS informs FONASA monthly about total hospital output. FONASA uses this information, in combination with its fee schedule, to determine how much to reimburse to each RHS.

With the FONASA transfers in hand, each RHS decides how to allocate those resources among its several hospitals. Hospital output does not seem to be a determinant of how much each hospital gets, however; instead, hospitals are paid primarily on the basis of the number and types of employees they have on their payroll. This financing method promotes inefficiency: inappropriate staffing patterns perpetuate themselves; and hospital managers and technicians have

no incentive to reduce costs or serve demand. Yet this practice constitutes the most common method of financing public hospitals in developing countries, including Latin America and the Caribbean (see the case of Colombia below).

Reimbursement of hospitals by RHSs becomes an even more confusing process owing to the fact that Chilean public hospitals now generate revenue from user fees. Thus RHSs have started to subtract the entire cost recovery revenue, or part of it, from what they would have reimbursed each hospital in the absence of user fee revenue. In other words, RHSs tax the revenue of their hospitals (by reducing the reimbursement amount), and use tax proceeds to cross subsidize other hospitals within their jurisdiction, especially those that are more inefficient or that have a more limited ability to generate user fees.

### **3.2.5 Colombia**

In 1993 the government of Colombia passed Law No. 100 introducing radical reform in the social security health system. The main goals of the reform were to achieve: (1) universal health care coverage; (2) greater efficiency in the provision of services; and (3) adequate levels of health care quality. To achieve these goals the following strategies were designed:

#### **3.2.5.1 Introduction of Competition Among Insurers to Improve Quality of Care**

Under the new system, all Colombians are entitled both to a single health benefits package and to the right to choose a health insurer. People with ability to pay join the so-called “contributory regime,” enrolling in an Health Promotion Entity (*Empresas Promotoras de Salud*, EPS). EPS affiliation is contingent on the payment of a monthly premium equal to 12 percent of the worker’s salary, one percentage point of which is directed to a solidarity fund called *Fondo de Solidaridad y Garantía* (FOSYGA), which also receives a large government subsidy. The poor (defined on the basis of employment status and income) and the indigent are covered by the “subsidized regime,” enrolling in one of several ARSs (Managers of the Subsidized Regime). FOSYGA redistributes its solidarity fund (the 1 percent plus the government subsidy) by channeling resources to EPSs and ARSs such that each beneficiary contributes to his or her insurer, directly or with the help of subsidized funds, a fixed payment known as a Capitation Payment Unit. This single payment eliminates price competition and is intended to promote quality competition. There is evidence that EPSs are making important efforts to compete in terms of quality.

#### **3.2.5.2 Introduction of Competition Among Providers**

Before the reform, public and social security hospitals financed their operations through historical budgets (supply subsidies). Under the new system, once the entire population is affiliated to either to an EPS or an ARS, public hospitals will no longer receive these supply subsidies. Instead, public and private providers are expected to finance their expenditures by selling services to insurance companies (EPSs or ARSs). This mechanism, which forces providers to compete in terms of quality and price, is expected to bring about a structural change in the health system by

converting government direct health subsidies to providers into EPS or ARS payment for care provided.

### **3.2.5.3 Increase Levels of Public Resources to Promote Solidarity between the Well-Off and the Poor**

Public health subsidies were substantially increased to make universal coverage of the population possible, although handling of these resources, and decisions regarding their allocation, remain highly centralized. Overall, public subsidies for health expressed as a percentage of GDP have more than doubled during the last five years. In addition, payroll contributions to health increased from 8 percent to 12 percent during that period.

### **3.2.5.4 Managed Competition**

Colombia introduced a system that relies on competition to promote improvements in productive efficiency and quality. However, the occurrence of several market failures calls for government intervention. For example, users' freedom to choose among insurance companies—a central feature of the reform—strongly depends on information availability about quality levels of services covered by the EPSs and health services contracted by them. Risk selection among insurers and the formation of cartels and monopolies among providers must be controlled as well. Also, some geographic areas do not present all necessary conditions for perfect competition between insurers and health providers for two main reasons: (1) insurers may not be interested in operating in remote locations, and (2) some public hospitals will remain natural monopolies in some isolated areas in the country.

In an effort to overcome market failures the government has adopted a series of measures that are either coercive or that offer incentives to insurers and providers and that are intended to protect the most disadvantaged citizens. These measures seek to (1) avoid adverse selection by beneficiaries and risk selection by insurers; (2) guarantee minimum quality standards among providers through accreditation and quality controls; (3) allow beneficiary mobility among insurers; and (4) standardize the basic package of health services.

As elsewhere in Latin America, public hospitals in Colombia are financed according to historical budgets. Reform Law 100 defined mechanisms whereby government subsidies to public health care suppliers would progressively shift toward the demand side of the market. This would be done by reducing each year the amount of public subsidies going to government hospitals and increasing the volume of subsidies going into FOSYGA, the health redistribution fund.

This has not yet happened, however. A good part of the additional resources that the government made available to finance health care under the reform has gone to pay for ever-increasing deficits in public hospitals. Recently, the government has designed a new system that tends to limit the amount of supply subsidy to public hospitals, and to allocate them in accordance with the types and volumes of production.

Yet it will take time for public hospitals to adapt to a new system where the bulk of their revenue comes from the sale of services to EPSs and ARSs and a decreasing amount comes from supply subsidies as budgets. The new law contemplates provisions to ensure a minimum amount of resources available for hospitals. With the reform, ARSs and EPSs can purchase care from either public or private providers under a competitive environment. However, to protect the financial survival of public hospitals, the law states that for some time ARSs are obliged to purchase a minimum of 40 percent of services from public hospitals.

EPSs reimburse public and private providers primarily on a fee-for-service basis. ARSs, instead, set up capitation contracts with public hospitals. There is evidence that public hospitals do not change their behavior when receiving capitation payments from ARSs, and continue doing business as usual, being somewhat unresponsive to what capitation contracts state and to client demand and service quality.

There have not been any systematic evaluations of health care quality, volume of service provision, consumer satisfaction, and provider profitability in Colombia since the reform. There is anecdotal evidence, however, that quality of care has deteriorated, consumption has increased, and private providers' profits have been reduced.

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## 04. General Trends and Research Opportunities

In both Asia and Latin America substantial reform has occurred recently in the area of provider payment systems. While reforms in Asia are largely national level reforms affecting the whole of the social security system, reforms in Latin America tend to be less centrally driven and uniform. For example in Argentina the primary reformers have been the individual Obras Sociales which have individually implemented payment reforms and each Obras Sociales has adopted a slightly different approach.

In Asia the primary goal of reform appears to have been cost containment: certainly in existing insurance schemes (such as those in Japan, Korea, and Taiwan) cost escalation became a substantial problem during the past two decades and provider payment reform has largely been targeted at controlling it. Motivation for provider payment reform in Latin America appears to be more mixed. In some instances (such as in Colombia) it has been part of broader system-wide reform aimed at achieving a number of goals including greater access and improved quality of care and efficiency. Provider payment reforms in Argentina appear to have occurred in response to other reforms, primarily moves to create greater competition between the insurance organizations (Obras Sociales). Although payment reform in Latin America has often aimed at achieving multiple goals, cost containment is commonly one of them. Thus in both Asia and Latin America a common core element of reforms has been shifting greater risk to providers.

Despite the fact that quite extensive reforms have taken place in provider payment in these two regions only limited systematic evaluation has occurred. Although theory suggests that payment methods that put greater risk on the provider, such as capitation, prospective packaged fees and global budgeting will lead to more cost conscious treatment modalities, strong empirical evidence of this in either region is not yet available. Preliminary evidence (primarily from China and Japan) suggests that treatment costs tend to decrease after a move to global budgeting or other prospective forms of payment, but there is an urgent need for thorough cross-country comparative study of the impact of reforms.

As shifting risk to providers is the common component to both the Latin American and Asian reforms, assessing the impact of this strategy would appear to be the obvious priority for research. Evaluation of impact could be carried out at at least two levels. First, evaluation of the impact of new forms of payment (such as capitation and case-based payment) on service outcomes, such as service utilization, treatment patterns and treatment costs needs to be conducted. If it appears that provider payment does affect treatment patterns then the second level of evaluation needs to explore the mechanisms through which this effect occurs.

Providers have several alternative means through which they could attempt to control costs and treatment patterns including changes in managerial structures, organizational reforms or new forms of contract between organizations. In the United States all of these factors appear to have

been important in explaining providers' response to new forms of payment: managed care organizations have altered treatment patterns and norms and there has been a trend towards increasing integration of financing and delivery. In Asia and Latin America it is not understood how providers respond to the incentives inherent in new payment mechanisms and consequently how desirable their actions are.

The review also highlighted, particularly in the cases of Brazil and Taiwan, how relative prices affect the behavior of providers. In countries such as Brazil, where price and utilization data exist for a relatively long period and there have been changes in price tariffs over time, it would be interesting to investigate how service delivery statistics (such as utilization rates for different services) have varied with price and how different kinds of providers have responded to changes in tariffs. This would help payers develop fee schedules that encourage greater consumption of more cost-effective health services.

Other country experiences (most notably Korea and Taiwan) emphasized the importance of the political environment. Provider payment reform tends to be a highly political issue as it inevitably redistributes resources between different groups. Research could usefully investigate the policy process through which successful provider payment reform has occurred and how resistance to provider payment reform has affected the design of provider payment systems.

Finally the review has highlighted the importance of context to provider payment reform. Successful provider payment reform must be tailored to the particular health care system and environment in which it is to be implemented. Different countries have striven to achieve different objectives through reform of the provider payment system. It is critical that any analysis of the impact of provider payment reform take these differences into account.

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