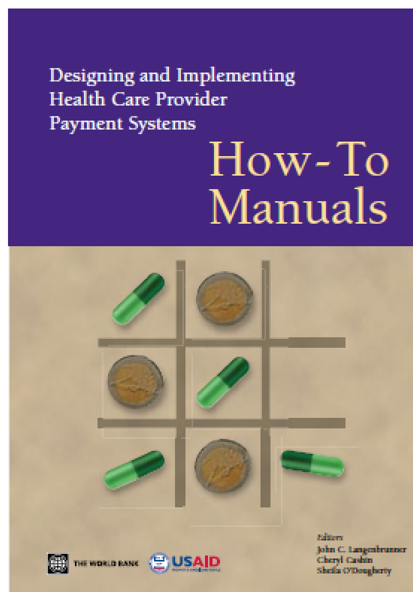

Designing and Implementing Health Care Provider Payment Systems How-To Manuals

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This document is an overview of the book for the web.

Strategic purchasing of health services involves a continuous search for the best ways to maximize health system performance by deciding which interventions should be purchased, from whom they should be purchased, and how to pay for them. In such an arrangement, the passive cashier is replaced by an intelligent purchaser that can focus scarce resources on existing and emerging priorities rather than continuing entrenched historical spending patterns. Having experimented with different ways of paying providers of health care services, countries increasingly want to know not only what to do when paying providers, but also how to do it, particularly how to design, manage, and implement the transition from current to reformed systems, and this how-to manual addresses this need.

The book has chapters on three of the most effective provider payment systems: primary care per capita (capitation) payment, casebased hospital payment, and hospital global budgets. It also includes a primer on a second policy lever used by purchasers, namely, contracting. This primer can be especially useful with one provider payment method: hospital global budgets. The volume's final chapter provides an outline for designing, launching, and running a health management information system, as well as the necessary infrastructure for strategic purchasing.*

* This summary was written by John C. Langenbrunner, Lead Economist, Health at The World Bank.

Provider Payment Methods and Systems - A Short Overview

BY JOHN C. LANGENBRUNNER

Provider payment systems can be a powerful tool to promote health systems development and achieve health policy objectives. A ***provider payment method*** may be defined simply as the mechanism used to transfer funds from the purchaser of health care services to the providers. A ***provider payment system*** may be defined as the payment method combined with all supporting systems, such as contracting, management information systems and accountability mechanisms that accompany the payment method. In the context of health systems, therefore, provider payment systems accomplish far more than simply the transfer of funds to cover the costs of services. The incentives that are created by the payment methods and the responses of the providers to those incentives, the management information systems to support the provider payment methods, and the accountability mechanisms established between providers and purchasers can have profound effects on the way health care resources are allocated and services are delivered.

Payment systems should further health policy objectives by encouraging access to necessary health services for patients, high quality of care, and improved equity, while at the same time promoting the effective and efficient use of resources and, where appropriate, cost containment. Under resource allocation and purchasing arrangements (RAP), payments to health care providers can be approached in three ways:

- direct payment to providers by the patient;
- direct payment to providers by the patient, but with later full or partial reimbursement;
- direct payment to the provider by the RAP mechanism, with only a limited co-payment or informal charge paid by the patient.

Direct payment by the patient sends the consumer a clear signal about the price of the service. However, poor patients or patients receiving expensive care for major illnesses may not have the disposable income. Even full or partial reimbursement later may not be able to bridge the period between paying for the service and receiving a full or partial reimbursement.

When providers are reimbursed primarily through RAP arrangements rather than patients, the payment incentives and mechanism used, rather than prices and demand, create the behavioral environment for suppliers of services.

Due to information asymmetry neither consumers nor producers have full information about preferences, prices, or the market in which they operate. The level, mix, and quality of care for patients can be ascertained only after the fact, and good health depends on other factors besides the health services consumed. Physicians act as agents for their patients, but often not even they know the full impact of the interventions that are recommending. Both consumer and provider behavior is therefore important. Pricing and payment mechanisms provide an opportunity to shape the behavior of both through incentives.

Types of Payment Systems Currently in Use

A short overview of payment methods can be classified along several dimensions, but here popular approaches for both outpatient (particularly primary health care or PHC) and inpatient care are presented.

Options for Outpatient and PHC Payment Methods

There are three main types of PHC payment methods: (1) line-item budget; (2) per capita; and (3) fee-for-service (with or without a fee schedule). It is also possible to pay PHC providers per case or illness episode, but such payment methods are rarely used for PHC services, because these do not correspond to the fundamental PHC set of services, which should be oriented toward health promotion, prevention, and case management. Per-case payment systems are also too complicated to design for primary health care and outpatient care, and would place an excessive administrative burden on the purchaser, as most chronic conditions do not have a discrete endpoint, and a separate payment system would have to be developed for preventive services.

The three most common types of payment methods, their characteristics, and the incentives they are likely to create are outlined in Table 1. Within each type of payment method, there are variations that may create a different set of incentives, and the payment methods may be used in combination to enhance or mitigate the incentives that are created by each method individually.

Line Item Budget

A **line-item budget** provider payment method is the allocation of a fixed amount to a health care provider to cover specific line items, or input costs (e.g., personnel, utilities, medicines and supplies), for a certain period of time. Line-item budgeting does offer strong administrative controls, often valued by government-run systems. At a theoretical level, technical and allocative efficiency of health interventions can be optimized by manipulating the government budget lines over time to increase delivery of cost-effective health interventions and decrease delivery of less cost-effective interventions. This assumes governments can track and understand the right combination to achieve these outputs, but in reality, they often cannot for lack of good monitoring information.

Fee-For-Service

In a **fee-for-service system**, the provider is reimbursed for each individual service provided. Fee-for-service provider payment systems may be either input-based or output-based. A fee-for-service system is input-based if services are not bundled, and fee schedules are not set in advance. In this case, providers are permitted to bill payers for all costs incurred to provide each service. Such a system is often called “retrospective cost-based” payment, which is the term commonly applied to this type of system in the **United States** and other countries. A fee-for-service provider payment system can also be output-based if fees are set in advance (as in **Canada, Japan,** and **Germany)**, and services are bundled to some degree. In this case, the provider is paid the fixed fee for the pre-defined service regardless of the costs incurred to deliver the service.

Per Capita

In a **per capita** payment system, the provider is paid, in advance, a pre-determined fixed rate to provide a defined set of services for each individual enrolled with the provider for a fixed period of time. Per capita payment systems are output-based, and the unit of output is the coverage of all pre-defined services for an individual for a fixed period of time, usually one month or one year. The key principle of a per capita payment system is that the payment to a provider is not linked to the inputs the provider uses or the volume of services provided. Therefore, some risk is shifted from the purchaser to the provider. If the provider incurs costs that are greater than the per capita budget, the provider is liable for these costs. On the other hand, if the provider achieves efficiency gains and incurs costs that are lower than the per capita budget, the provider can retain and reinvest this surplus.

Table 1

Types of PHC and Outpatient Payment Methods, Characteristics and Incentives

Payment Method	Payment rate determined prospectively or retrospectively?	Payment to providers made prospectively or retrospectively?	Payment based on inputs or outputs?	Incentives for providers
Line-item budget	Prospectively	Prospectively	Inputs	Under-provide services; refer to other providers; increase inputs; no incentive or mechanism to improve the efficiency of the input mix; incentive to spend all remaining funds by the end of fiscal year
Per capita	Prospectively	Prospectively	Outputs	Improve efficiency of input mix; attract additional enrollees; decrease inputs; under-provide services; refer to other providers; focus on less expensive health promotion and prevention; attempt to select healthier enrollees
Fee-for-service (fee schedule)	Prospectively	Retrospectively	Outputs	Increase the number of services including above the necessary level; reduce inputs per service
Fee-for-service (no fee schedule)	Retrospectively	Retrospectively	Inputs	Increase number of services; increase inputs

Hospital Payment Systems

There are five main types of hospital service payment methods. Two discussed above, line item budget and fee-for-service can be applied to inpatient services as well. There are furthermore three additional models: (1) global budget; (2) per diem (bed-day); and (3) case-based. The broad types of payment methods, their characteristics, and the incentives they are likely to create are outlined in Table 2 below. Within each type of payment method, there are variations that may create a different set of incentives, and the payment methods may be used in combination to enhance or mitigate the incentives that are created by each method individually. The three additional models are discussed briefly.

Global Budget

A **global budget** at the hospital level is a payment fixed in advance to cover the aggregate expenditures of that hospital over a given period to provide a set of services that have been broadly agreed upon. A global budget may be based on either inputs or outputs, or a combination of the two. For example, global budgets were determined largely on the basis of historical costs in the 1990s in **Canada** and **Denmark**, whereas **France** and **Germany** have incorporated measures of output, such as bed-days or cases, into global budgets for hospitals. **Ireland** introduced a case-mix adjustment to global budgets for acute hospital services in 1993, and since then nearly all EU countries with global budgets have followed with some case-mix adjustment.

Per Diem

In a **per diem** system, the dominant incentive is to increase the number of hospital days, increasing bed occupancy, and

possibly increasing bed capacity and generally shifting outpatient and community-based rehabilitation services to the hospital setting. At the same time, there is an incentive to reduce the intensity of service provided during each bed-day. High occupancy rates are achieved through increasing hospital admissions and **average length of hospital stay** (ALOS). The incentive to increase ALOS is likely to be stronger than the incentive to increase admissions, because there is also an incentive to reduce inputs per day, and hospital days early in a hospital stay tend to be more expensive than later in the stay. The average per diem rate is easy and quick to calculate and implement as it may be based on the total historical annual hospital costs divided by the total number of bed-days. The average per diem rate may also be adjusted to reflect characteristics of patients, clinical specialty and variations in case-mix across hospitals.

Adjustments to the per diem rate based on case-mix may serve as a useful transition mechanism from a per diem payment system to a case-based payment system. In fact, a per-diem hospital payment system may be an appropriate intermediate step in the transition to a case-based system, because a per diem system is administratively simple to implement, and it can be used to begin collecting the data that are necessary to design a case-based system.

Table 2

Types of Hospital Payment Methods, Characteristics and Incentives

Payment Method	Payment rate determined prospectively or retrospectively?	Payment to providers made prospectively or retrospectively?	Payment based on inputs or outputs?	Incentives for providers
Line-item budget	Prospectively	Prospectively	Inputs	Under-provide services; refer to other providers; increase inputs; no incentive or mechanism to improve the efficiency of the input mix; incentive to spend all remaining funds by the end of fiscal year
Global budget	Prospectively	Prospectively	Inputs or Outputs	Under-provide services; refer to other providers; increase inputs; mechanism to improve efficiency of the input mix
Per diem	Prospectively	Retrospectively	Outputs	Increase number of days (admissions and length of stay); reduce inputs per hospital day; increase bed capacity
Case-based	Prospectively	Retrospectively	Outputs	Increase number of cases, including unnecessary hospitalizations; reduce inputs per case; incentive to improve the efficiency of the input mix; reduce length of stay; shift rehabilitation care to the outpatient setting
Fee-for-service (fee schedule and bundling of services)	Prospectively	Retrospectively	Outputs	Increase the number of services including above the necessary level; reduce inputs per service
Fee-for-service (no fee schedule)	Retrospectively	Retrospectively	Inputs	Increase number of services; increase inputs

Case-Based

Case-based hospital payment systems simultaneously create the incentives to increase the number of cases and to minimize the inputs used on each case. Because providers have more control over resource use per case than the total number of treated cases, the latter incentive is typically stronger, and case-based hospital payment systems have been used as a mechanism to control costs and reduce capacity in the hospital sector.

Which Payment System to Choose?

This characterization of payment mechanisms can be applied to funding of both hospital and individual providers (e.g., physician). Impacts of these alternative payment mechanisms should be assessed in the context of objectives such as quality of care, cost, and targeting to the poor. But often the objectives are multiple and competing, and conflicts or tensions arise across the multiple behaviors of purchasers, providers, and patients. Several parties' objectives may be equally desirable but mutually irreconcilable in the sense that payment systems' capacity to achieve each objective are not the same, and multiple objectives may compete or in conflict with each other. The literature suggests that retrospective elements of payment systems address issues of access, acceptable levels of provider risk, adequate revenues, patient selection, and quality enhancement. Prospective elements in payment systems do better on optimal levels of services, efficiency, and cost containment.

The market structure, or the level of choice and competition in the system, and the ability of providers to select or refuse care to patients will enhance or mitigate the incentives created by provider payment methods. For example, per capita payment systems that are based on the number of people covered rather than services provided, with payment rates to providers both set and made prospectively, create incentives to provide fewer services or refer patients to other providers once an individual is enrolled, unless performance targets are set and monitored by the purchaser. If there is competition and choice in the system, however, providers lose financially if patients become dissatisfied and choose another provider, and therefore the incentive to under-provide services is mitigated. Providers will also have the incentive to reduce their costs by encouraging healthier individuals to enroll for their services and discourage individuals with costlier health problems.

In the context of low- and middle-income countries, however, providers are often government-owned monopolies, and effective choice is limited. Choice may be particularly limited in isolated or remote geographic areas (pockets) with only one provider available. There is therefore little opportunity for dis-satisfied users to change provider and thus no competition. In such cases, the health purchaser may intervene and establish performance targets and monitor performance, for example through clinical audits, as part of the payment system.

Conversely, the provider payment system also may influence the level of competition and choice in the system. Some provider payment methods facilitate increased competition and choice, whereas others inhibit competition and choice. For example, per capita payment systems and case-based hospital payment systems create the conditions for competition and choice, because in these systems the money follows the patient. It is the next step in increasing competition to allow the patient's choice, or the patient's agent's choice, to determine to which providers the money flows. If the money follows the patient, and there is choice, providers will compete for patients, presumably with better quality of care and patient-centered services. Input-based payment systems, such as line-item budgets for recurrent costs, however, may inhibit competition and choice, because the money does not explicitly follow the patient.

No single set of incentives will address the multiple objectives of purchasers, providers, and patients. As a result, purchasers and policymakers must understand and address policy objectives explicitly. And, provider payment systems may lead to both

intended and unintended consequences, such as incentives to increase the number of services provided beyond what is necessary or to reduce inputs used to provide care. Other unintended consequences of provider payment systems may include "gaming" of the system, cost shifting, or increased paperwork for providers. The effects of provider payment systems on the health care system vary widely depending on contextual factors, including the level of resources available for health care, the degree of competition and choice, and the opportunities and constraints facing providers to respond to provider payment incentives. The way the provider payment systems are designed and implemented, and the extent to which the contextual factors are addressed, will strongly influence how successfully the provider payment methods contribute to achieving health policy goals.

Other Constraints and Considerations

Decisions about which provider payment systems should respond to an explicit hierarchy of policy priorities, but typically there are practical considerations as well.

Purchasers first must decide on policy objectives—increased revenues, efficiency, cost-containment, access, quality, administrative simplicity, or some combination? The payment system chosen and the incentives used have to address one or more health sector policy objectives at that particular time. Related, incentives must be chosen in tandem with other factors such improved knowledge about clinical outcomes, cultural factors, and providers' professional ethics. On the practical side, due to asymmetry of information, payments are often linked to outcomes, which are more easily observable and verified (by both parties) than the attainment of policy objectives. These outcomes are often intermediate to full health status outcomes; examples might be services provided or hospital discharge.

How Much Time and Information Available?

Often when purchasers have to develop a payment system, they have too little time and technical resources to design an optimal one. The purchaser may lack technical capacity and sound baseline information on cost and volume of needed care. Decisions about incentives must revert to options based on readily available information, technical capacity, and time available to design, implement, and then monitor payment systems.

Is There Management Capacity and Adequate Autonimization of Providers?

Countries that have experience of new payment systems as described in this volume have recognized that the full efficiency gains that can be made will not happen automatically. They will require some explicit delegation of management responsibility to the primary care clinics and to hospitals. In turn this relies upon there being sufficient management capacity at the hospital to realize the potential of the payment systems. Decentralization of management capacity and responsibility is an important prerequisite.

What are Acceptable Levels of Risk for Purchaser and Provider?

During the last two decades, new and more sophisticated payment systems have evolved with broader units of payment and payments set prospectively. Many purchasers have adopted a fixed-price payment for definable products that cover entire clinical episodes such as an outpatient surgery. In every case, part or all of the financial risk is then effectively transferred from the RAP arrangement back to the provider and patient. Global experience cautions against full risk sharing, but encourage some "supply side cost sharing" only, with purchaser and provider sharing in risk arrangements to address moral hazard issues. An alternative is to impose high co-payments or user fees, but in developing countries that quickly erodes financial protection.