

# The Introduction of Market Forces in the Public Hospital Sector

From New Public Sector Management to Organizational Reform

Melitta Jakab, Alexander Preker, April Harding and Loraine Hawkins

June 2002





**THE INTRODUCTION OF MARKET FORCES IN  
THE PUBLIC HOSPITAL SECTOR**

*From New Public Sector Management to Organizational Reform*

**Melitta Jakab, Alexander Preker, April Harding, and Loraine Hawkins**

**June 2002**

## Health, Nutrition and Population (HNP) Discussion Paper

This series is produced by the Health, Nutrition, and Population Family (HNP) of the World Bank's Human Development Network ([HNP Discussion Paper](#)). The papers in this series aim to provide a vehicle for publishing preliminary and unpolished results on HNP topics to encourage discussion and debate. The findings, interpretations, and conclusions expressed in this paper are entirely those of the author(s) and should not be attributed in any manner to the World Bank, to its affiliated organizations or to members of its Board of Executive Directors or the countries they represent. Citation and the use of material presented in this series should take into account this provisional character. For free copies of papers in this series please contact the individual authors whose name appears on the paper.

Enquiries about the series and submissions should be made directly to the Editor in Chief. Submissions should have been previously reviewed and cleared by the sponsoring department which will bear the cost of publication. No additional reviews will be undertaken after submission. The sponsoring department and authors bear full responsibility for the quality of the technical contents and presentation of material in the series.

Since the material will be published as presented, authors should submit an electronic copy in a predefined format as well as three camera-ready hard copies (copied front to back exactly as the author would like the final publication to appear). Rough drafts that do not meet minimum presentational standards may be returned to authors for more work before being accepted.

The Editor in Chief of the series is [Alexander S. Preker](#) ([apreker@worldbank.org](mailto:apreker@worldbank.org)); For information regarding this and other World Bank publications, please contact the [HNP Advisory Services](#) ([healthpop@worldbank.org](mailto:healthpop@worldbank.org)) at: Tel (202) 473-2256; and Fax (202) 522-3234.

ISBN 1-932126-62-7

© 2002 The International Bank for Reconstruction and Development / The World Bank  
1818 H Street, NW  
Washington, DC 20433

All rights reserved.

## Health, Nutrition and Population (HNP) Discussion Paper

### The Introduction of Market Forces in the Public Hospital Sector *From New Public Sector Management to Organizational Reform*

Melitta Jakab<sup>a</sup>, Alexander Preker<sup>b</sup>, April Harding<sup>c</sup>, and Loraine Hawkins<sup>d</sup>

<sup>a</sup> Ph. D. Candidate, Harvard University, Boston, Mass., USA

<sup>c</sup> Chief Economist for Health, Nutrition and Population, World Bank, Washington, DC, USA

<sup>b</sup> Senior Economist, Health, Nutrition and Population, World Bank, Washington, DC, USA

<sup>d</sup> Senior Health Specialist, Europe and Central Asia Region, World Bank, Washington, DC, USA

Paper Prepared as Training Module for the Joint Harvard and World Bank Institute  
Flagship Course on Health Sector Reform and Sustainable Financing, Boston, USA

**Abstract:** This Discussion Paper was prepared as a background document for the Hospital Reform Module of the Joint Harvard/World Bank Institute Flagship Course on Health Sector Reform and Sustainable Financing. The Flagship course provides a practical review and update of current issues in health systems reform and financing for senior policy makers from developing countries. Since its inception, the Flagship course has reached more than 3,000 participants from over 50 countries. Heavy investment over the past 30 years has made the hospital sector the largest expenditure category of the health system in most developed and developing countries. Despite shifts in attention and emphasis toward primary care as a first point of contact for patients, in most countries, hospitals remain a critical link to health care, providing both advanced and basic care for the population. Often, they are the provider “of last resort” for the poor and critically ill. Although, it is clear that hospitals play a critical role in ensuring delivery of health services there is much less agreement about how to improve the efficiency and quality of care provided. This Discussion Paper provides insights into recent hospital reforms undertaken throughout the world, with an emphasis on organizational changes such as increased management autonomy, corporatization, and privatization. It provides some insights about these popular reform modalities from a review of the literature, reform experiences in other sectors and empirical evidence from hospital sector itself. The material presented tries to answer three questions: (a) what problems did this type of reform try to address; (b) what are the core elements of their design, implementation and evaluation; and, (c) is there any evidence that this type of reform is successful in addressing problems for which they were intended? While this paper focuses on issues related to the design of the reforms, the paper also reports the findings from a larger study that examined the implementation and evaluation of such reforms so that they will be available to countries that are considering venturing down this reform path.

**Keywords:** New public sector management, hospital reforms, autonomization, corporatization, privatization, organizations, institutions

**Disclaimer:** The findings, interpretations and conclusions expressed in the paper are entirely those of the authors, and do not represent the views of the World Bank, its Executive Directors, or the countries they represent.

**Correspondence Details:** Alexander Preker, The World Bank, 1818 H Street, Mail Stop G7-702, NW, Washington DC, 20433, USA; Tel: (202) 473-2327; Fax: (202) 522-3234; Email: [apreker@worldbank.org](mailto:apreker@worldbank.org); Web: [www.worldbank.org/hsd](http://www.worldbank.org/hsd)



# CONTENTS

PREFACE .....	VII
ACKNOWLEDGMENTS .....	XI
1. INTRODUCTION.....	1
2. COMMON PERFORMANCE PROBLEMS IN PUBLIC HOSPITALS AND THEIR CAUSES .....	2
3. IMPROVING HOSPITAL PERFORMANCE THROUGH ORGANIZATIONAL REFORM.....	6
Autonomy .....	7
Market exposure.....	12
Residual claimant status .....	16
Accountability .....	18
Social functions .....	21
Organizational modalities .....	21
Budgetary Units       22	
Autonomous Public Hospitals 24	
Corporatized Public Hospitals 25	
Privatized Hospitals   28	
Dysfunctional reform design .....	28
4. IMPROVING HOSPITAL PERFORMANCE THROUGH EXTERNAL PRESSURES..	
.....	31
Strengthening government oversight .....	31
Creating strategic purchasing .....	37
Increasing market pressures .....	43
Encouraging good governance .....	51
5. MANAGERIAL INSTRUMENTS.....	54
Finance.....	54
Marketing .....	55
Human resources.....	55
Procurement .....	55
Business management strategy .....	56
Clinical management strategy .....	56
6. LESSONS LEARNED: CHALLENGES OF REFORM DESIGN AND IMPLEMENTATION.....	58
Challenges of consistent design .....	58
Challenges of successful implementation .....	60
7. CONCLUSIONS.....	62

<b>APPENDIX A . CRITICAL SKILLS: PAYING HOSPITALS .....</b>	<b>65</b>
Global budget .....	65
Line-item budget .....	66
Retrospective fee-for-service reimbursement.....	66
Prospective case-based payment .....	67
<b>APPENDIX B. CRITICAL SKILLS: CONTRACTING WITH PUBLIC HOSPITALS.....</b>	<b>70</b>
Legal status of contracts in the public sector.....	70
Purpose of a contract .....	71
The contracting cycle .....	71
Types of Contracts.....	72
What does a contract look like? .....	72
<b>APPENDIX C. CRITICAL SKILLS: MONITORING AND EVALUATING HOSPITAL PERFORMANCE .....</b>	<b>75</b>
Technical efficiency .....	75
Allocative efficiency.....	76
Quality .....	77
Equity .....	78
Trade-offs among objectives .....	79

## PREFACE

This Discussion Paper was prepared as a background document for the Hospital Reform Module of the Joint Harvard/World Bank Institute Flagship Course on Health Sector Reform and Sustainable Financing. The Flagship course provides a practical review and update of current issues in health systems reform and financing for senior policy makers from developing countries. Since its inception, the Flagship course has reached more than 3,000 participants from over 50 countries.

The Discussion Paper provides insights into recent hospital reforms undertaken throughout the world, with an emphasis on organizational changes such as increased management autonomy, corporatization, and privatization. The material presented tries to answer three questions: (a) what problems did this type of reform try to address; (b) what are the core elements of their design, implementation and evaluation; and, (c) is there any evidence that this type of reform is successful in addressing problems for which they were intended?

The role of the hospital in the health care system has evolved significantly during the past 100 years. At the turn of the 20<sup>th</sup> Century, hospitals in many countries were still a provider of “last resort” feared and to be avoided if at all possible since the chance of leaving alive were slim. In his famous work on hospital *The hospitals, 1800-1948*, Able-Smith describes how “worthy patients in the voluntary hospital of the 19<sup>th</sup> century, excluded the incurable, hopeless and contagious. The families of those who were admitted had to guarantee in advance funeral and all related expenses before the hospital would accept them as patients.

At the beginning of the 21<sup>st</sup> Century we find a totally different story. In developed countries, the hospital has become the “cathedral” of modern technology, revered and coveted by many. Many local communities want “monuments” of their own. Not surprisingly, a “built” hospital bed is often a “filled” hospital bed leaving little room for decisions by policymakers and managers alike. Emotions run high when countries try to downsize, privatize or close hospitals. Many politicians have lost their jobs in the process of undertaking such reforms.

The story in developing countries is similar. Despite much attention and emphasis on primary care as a first point of contact for patients, hospitals remain an important source of critical health care services in most low- and middle-income countries, providing both basic and advanced care for the population. They are once again often the provider “of last resort” for the critically ill and poor. Yet they also often comprise the largest expenditure category of the health system.

As a result, of these trends, hospitals are often the target of health sector reforms aimed at improving efficiency, quality, and consumer responsiveness, as well as broader reforms in financing of the health care delivery system. In many countries reforms in the hospital sector are often part of decentralization and restructuring of government-owned service delivery systems. Such reforms include altering the incentive regime that managers within the organizations are exposed to, and changing the external policy environment, governance structures, funding arrangements, and competitive pressures.

Reforms of this type, which are now commonplace throughout the world in the infrastructure, telecommunications and transportation sectors, include: (a) increasing the management autonomy of the organization (autonomization); (b) transforming the hierarchical bureaucracy into parastatal corporations that are exposed to market-like pressures (corporatization); and (c) outright

divestiture of the organizations from the public sector (privatization). They are often referred to as “new public management” or marketizing reforms.

Influenced by the lessons learned from the problems and reforms tried in other sectors, many health care policymakers have concluded that public hospitals’ performance problems are similarly grounded in the rigidity of hierarchical bureaucracies, the lack of control by managers over day-to-day operations of their facilities, and absence of performance-based incentives. Having successfully applied new public management techniques and marketizing reforms in other sectors, a natural next step is for policymakers to apply similar reforms to the health sector.

Initially, the reform of choice was to give hospitals some degree of management autonomy. Limited success with this type of reform in some settings led policymakers to go a step farther by transforming some of their state-owned hospitals into public corporations. The path-breaking reforms of this type, which occurred through the creation of Hospital Trusts in the United Kingdom (UK) and Crown Health Enterprises in New Zealand, drew worldwide interest. Soon many developing countries such as Hong Kong, Malaysia, Indonesia, Tunisia, and Argentina attempted similar reforms. Often they were accompanied by parallel reforms in the overall health policy framework, provider payment system, and competitive market environment.

The debates surrounding these reforms have been lengthy, heated, and rarely enriched by evidence gleaned from rigorous evaluation of experiences. Much of this debate centered on whether independent hospitals can play a positive role in a well-functioning health system. Polemics over this issue obscure the reality that in many industrial countries that have a traditionally paid for health services through social insurance, inpatient services have always been provided through a mixture of public, semi-autonomous parastatal, nongovernmental, and private hospitals.

Since the hospital sectors in all the European countries that use such mixed delivery systems are part of socially responsible health care systems, it is clear that independent hospitals can play a productive role in a well-functioning health system. Hence, the end-point of these reforms is not really at issue. What is at issue is when it makes sense to move from an integrated public system, to system with independent hospitals, and how to do so. What kinds of changes and improvements can these reforms bring? How can policymakers assure that these improvements will actually be forthcoming? How can they move from a rigid integrated delivery system, with hierarchical control of hospitals, to a better performing system that relies on indirect mechanisms to guide substantially more independent service providers.

This Discussion Paper examines such “marketizing” organizational reforms that rely on a combination of increased decision rights of hospital managers and market-based performance pressures. Other Discussion Papers attempt to crystallize key questions about objectives, design, implementation, and evaluation of such reforms. All highlight several important areas for further investigation:

- the institutional and contextual requirements for and constraints to “marketizing” organizational reforms (e.g., what works at different income levels, stages of health systems development, cultural settings, market environments)
- a direct comparison of autonomized, corporatized and privatized units to see which reform creates a more workable hospital system in different contexts
- policy options for reforming public hospitals in situations of extreme government failure (is there any evidence that improved management of integrated hierarchical systems do

- better in this context than if governments were to introduce organizational reforms, complex as they may be
- the nature of the parallel reforms in management, policy oversight, resource governance, resource allocation/purchasing arrangements and market environment that are needed for successful reform
  - ways to achieve more rigorous and on-going monitoring and evaluation of the reforms to ensure that policymakers will use the lessons learned and that these will be available to countries that have not yet ventured down the organizational reform path.

For additional research on this topic, readers may also want to consult *Innovations in Health Care Delivery: The Corporatization of Public Hospitals* by Alexander Preker and April Harding, Eds. and *Hospitals in a Changing Europe* by Martin McKee and Judith Healy.

*Alexander S. Preker*

Chief Economist  
Health, Nutrition and Population  
Human Development Department  
World Bank

*April Harding*

Senior Economist  
Health, Nutrition and Population  
Human Development Department  
World Bank



## **ACKNOWLEDGMENTS**

The authors are grateful for reviews provided by Simon Blair, Philip Davis, Jerry La Forgia, Christopher Lovelace and Paul Shaw. Invaluable insights from thematic reviews and country case studies was provided by Alexandre Abrantes, Hedi Achouri, Ali Alkatiri, Yahaya Baba, Mukesh Chawla, Simon Corden, Willy De Geyndt, Ramesh Govindaraj, Christopher Ham, Loraine Hawkins, Judith Healy, William C. Hsiao, Rozita Halina, Tun Hussein, Melitta Jakab, Syed Al Junid, Eva Jarawan, Patricio V. Marquez, Samuel S. Lieberman, Martin McKee, Lynne McKenzie, So Nyunt-U Kai Mead Over, Hong Phua, Laura Rose, Graham Scott, Naoko Watanabe, James Webster, and Winnie C. Yip. The Findings, interpretations and conclusions expressed in the paper are entirely those of the authors, and do not represent the views of the World Bank, its Executive Directors, or the countries they represent.

The Authors are also grateful to the World Bank for having published the report as an HNP Discussion Paper.



# 1. INTRODUCTION

Throughout the world, governments are reassessing their role in health service delivery and in particular in the provision of hospital care. They are doing so in response to often encountered problems in the public service delivery sector: inefficiency, user dissatisfaction, brain drain on qualified personnel, failure to reach poverty groups, waste, and sometimes, fraud and corruption. These problems are attributed to the nature of public hospitals, which is often characterized by lack of rewards for good performance, lack of penalties for poor performance, and lack of instruments for hospitals to change their behavior. This creates an institutional environment where hospitals have neither the reason, nor the instruments to improve their performance.

While privatization may seem as an alternative to the problems of public hospitals, many countries are reluctant to pursue this approach. First, privatization might not be politically feasible because many people would think government was reneging on its (statutory) obligations to provide health care for its population. Second, objectives other than efficiency and quality improvement, at first sight, may appear to be better served by keeping hospital ownership in the public sector. For instance, the hospital sector is a large employer, and great reduction in medical manpower due to privatization is not an acceptable trade-off even if it leads to improvements in efficiency and quality. Third, some attempts at privatization in lower middle-income countries and low-income countries have been unsuccessful—often because inadequacy and uncertainty about the revenue stream or contract (implicit or explicit) for public hospitals makes these assets unattractive to private investors.

The alternative that many countries have begun to explore is what we call hospital organizational reforms in the public sector. These reforms are often labeled as autonomization and corporatization but we are going to use the broader term hospital organizational reform. The common theme underpinning organizational reforms is that (i) ownership of service delivery is kept in the public sector but (ii) hospitals are moved out of the core public service, transformed into a more independent entity, and made responsible for their performance. This means applying structures and incentives characteristic of the private sector and competitive markets to publicly owned service delivery organizations. This is based on the expectation that market pressures will reward good performance while increasing the cost of poor performance and thereby contributing to greater efficiency and quality.

The objective of this course is to provide instruments and tools for policymakers to design, implement, and analyze organizational reforms in the public health service delivery sector. This course does not advocate any particular configuration of service delivery but hopes to enable participants to think through alternative design options and make informed choices for their own countries.

## 2. COMMON PERFORMANCE PROBLEMS IN PUBLIC HOSPITALS AND THEIR CAUSES

During the past 50 years, many low- and middle-income countries have established publicly funded health care systems with services delivered by public providers as part of the hierarchical public sector bureaucracy. Often with the help of donors, health sector policies focused on expanding the human resource capacity and physical infrastructure (clinics, diagnostic facilities, laboratories, and hospitals). Worldwide, the number of hospital beds rose between 1960 and 1980 from 5 million to 17 million, more than doubling the per capita supply. The number of doctors increased more than fivefold from 1.2 million to 6.2 million.

These input-focused strategies have contributed to many successes including improved equity and access to health care for millions of people, as well as the control of communicable diseases and other public health activities that respond well to direct government involvement. These accomplishments are impressive. However, increasingly serious weaknesses in health services are also apparent, including technical inefficiency, allocative inefficiency, failure to reach poverty groups, and poor responsiveness to user expectations.

- ❑ *Technical inefficiency.* Similar to other public services, technical inefficiency is a critical problem in public delivery of health services. Resources within facilities are often used poorly, and resource scarcity and waste often coexist. In some countries, especially in transitional economies, high inputs are at the root of technical inefficiencies in terms of staff and physical overcapacity. In other countries, low technical efficiency is caused by low throughput, morale, and motivation of public health care workers and lack of available drugs. Outdated treatment protocols and old and broken equipment also contribute to suboptimal efficiency of public service delivery.
- ❑ *Allocative inefficiency.* Public delivery of services—and health care is no different—obscures the cost of services and ignores their effectiveness. This minimizes the ability to deliver or even identify cost-effective interventions. In developing countries, allocative inefficiency is a severe problem, with resources often flowing disproportionately to urban, curative, and hospital-based care. In many African countries, the bulk of hospital spending is tied up in one or two major urban hospital facilities. These hospitals consume a large amount of scarce resources, and many have low occupancy rates.
- ❑ *Failure to reach poverty groups.* Although equity is a key motivation for public delivery of hospital services, distribution of resources in public systems is rarely focused on the most needy. As a result, expenditure on hospital services is an important contributor to impoverishment even in countries where the services ought to be free for users.
- ❑ *Poor responsiveness to user expectations.* Social services delivered by public providers are notably unresponsive and unaccountable to users. Stories abound of poor staff treatment of patients in government health facilities. To prepare the World Development Report 2000, the World Bank conducted interviews with more than 60,000 poor people in 47 countries. According to these interviews the complexity of bureaucratic procedures, rude and unresponsive officials, and withheld information discouraged the poor from using public services.

Organizational reform of hospitals cannot simultaneously address all of those performance problems. The type organizational reforms we will be talking about are instruments designed to

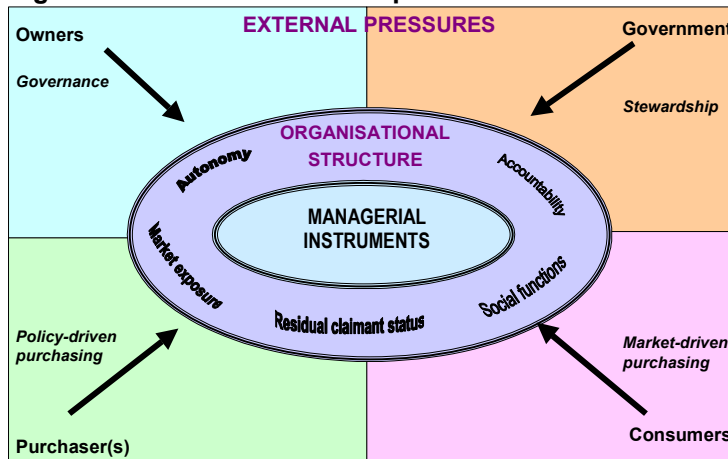
address inefficiencies and unresponsiveness as their primary objectives. That said, many countries set secondary reform objectives when engaging in such reforms. These might include staff retention in the public sector, increased rates of cost recovery, and reduction of public outlays, but it is easy to see that these objectives are connected to issues of efficiency and responsiveness.

If the priorities in the health sector are to improve equity and financial protection, organizational reform is not the appropriate policy instrument. Instead, improving health financing and regulation, for example, could provide a more effective and more direct approach to address these policy objectives. This also means that the lack of improvement in equity and financial protection through organizational reform is not a sign of failure for these kinds of reforms because they were not meant to support these policy objectives in the first place. Nonetheless, many countries engaging in organizational reform attempt to make sure that financial protection and equity not be undermined by these reforms.

To understand the causes of poor performance in public hospitals and the ways organizational reforms are expected to address them, we first ask “What factors determine the behavior and performance of hospitals in general?” To change the behavior and performance of hospitals, they need appropriate incentives (reasons) and instruments. Each one on its own is a necessary but not a sufficient condition to induce successful behavior change in organizations.

A hospital’s overall incentive regime can be decomposed into pressures originating from the **external environment** and pressures originating from the hospital’s **organizational structure**. **Managerial instruments** allow hospitals to respond to the pressures of the incentive regime. Economists often refer to managerial instruments as “the black box” because they have few analytical tools to look inside organizations and assess what factors make a difference for behavior and performance. This course is structured around these three concepts and attempts to provide a comprehensive understanding of ways of influencing hospital behavior and performance. (figure 1)

**Figure 1. Determinants of hospital behavior**



We start the discussion with **organizational structure**. Organizational structure is the main building block of this course and the focus of the next section. (section 3) We focus on organizational structure because until recently it has been a neglected and a poorly understood aspect of hospital behavior—most analysis and reform efforts focused on the impact of external pressures such as provider payment mechanisms. However, changes in hospital organizational structure through autonomization and corporatization have been increasingly applied over the past decade, and thus there has been an upsurge in interest in better understanding how hospital organizational structure contributes to performance.

When we speak about organizational structure in this course we refer to five key components: (i) allocation of decision rights (autonomy), (ii) market exposure, (iii) residual claimant status, (iv) accountability structures, and (v) social functions. In the next section, we review how each component is expected to influence hospital behavior, and how organizational reforms change them.

The second building block of this course is understanding the pressures put on hospitals by the **external environment**. These pressures come from the relationship of the hospital with other actors in the health system. External pressures originate from four main sources: government oversight, organized purchasing, market pressures and ownership.

- ❑ *Government oversight.* The basic task of government oversight in the health sector is threefold: (i) formulating health policy by defining vision and direction for the sector; (ii) regulating the actors in the health system; and (iii) collecting and using information.
- ❑ *Organized purchasing.* The hospital’s relationship with the collective purchaser(s) determines the financial incentives embedded in the payment mechanisms and the extent of competitive pressures on hospitals from organized collective purchasers.
- ❑ *Market pressures.* The hospital’s relationship with its consumers (market-driven purchasing) determines the extent of competitive pressures the hospital is subject to from unorganized individual consumers exercised through choice and user fees.
- ❑ *Ownership (governance).* Governance is commonly defined as the relationship between the owner and management of an organization. Good governance is said to exist when managers closely pursue the owners’ objectives rather than their own. Governance in public hospitals

is often problematic because the owners are physically far removed from management and cannot directly observe their actions and hold them accountable.<sup>i</sup>

These four functions are not necessarily separated from each other. For example, in Albania, the Ministry of Health carries out the ownership function of hospitals, pays hospitals, and regulates them. In contrast, in the Czech Republic, hospitals are owned by local governments, they are paid by competing social insurance funds, and regulation remains the role of the Ministry of Health. The former integrated approach is the predominant organizational arrangement in many countries in the public hospital sector. In Central-Eastern Europe and Latin America, these functions are more likely to be separated and shared among social insurance organizations, local governments, Ministries of Health.

We discuss these external pressures in detail in chapter 4 as complementary reforms needed to make organizational reforms work. We explore critical external pressures associated with successful organizational reforms. However, we will not attempt to provide a comprehensive review of alternative ways of structuring the external environment of hospitals. External pressures, and their impact on provider behavior, are explored in depth in other HNP Discussion Papers, such as those on “Paying, Regulating, and Contracting Providers,” and “Decentralization.”

In the third building block of the course, we will make an attempt to open the black box of organizations and look at **managerial instruments** that hospitals need to respond to the new incentives regime introduced under organizational reform. This is the topic of chapter 5.

In section 6, we summarize key lessons for design and implementation of complete organizational reforms. These lessons emerge from a review of a number of country cases where organizational reform was recently implemented. Finally, section 7 presents our conclusions.

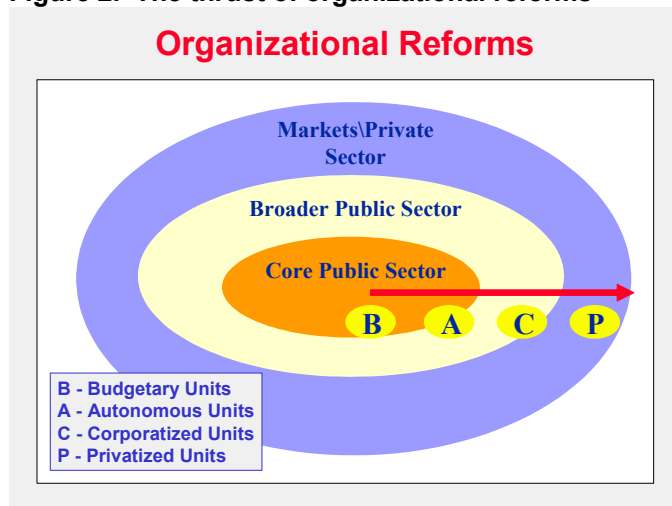
We also include three appendixes on (i) alternative payment mechanisms (appendix A ); (ii) designing contracts (appendix B ); and (iii) approaches to monitoring and evaluating hospital performance (appendix C ). We cannot do justice to these topics within the space of this discussion paper. We include them because these areas and skills become more important as hospitals gain autonomy, and we wanted to give those who want to follow-up on these topics a concise summary and starting point.

### 3. IMPROVING HOSPITAL PERFORMANCE THROUGH ORGANIZATIONAL REFORM

*Organizational reforms (i) move public hospitals out of the core public bureaucracy and transform them into more independent entities responsible for performance, and they also (ii) keep ownership in the public sector.*

A distinguishing characteristic of reforms reviewed in this course is that they rely on market mechanisms to carry out functions that used to be carried out by central planning authorities (figure 2). For this reason, such reforms are often termed “marketizing” reforms. Other kinds of organizational reforms—such as decentralization—change organizational and institutional structures but do not incorporate a greater use of market mechanisms. In this section, we ask what combination of central planning and market mechanisms create functional organizations.

Figure 2. The thrust of organizational reforms



Organizational reforms can be categorized by the extent to which central planning functions are replaced by market mechanisms. (figure 2) We categorize reformers into two groups: **autonomous units**, countries that applied limited change to the organizational incentives of their hospitals, and **corporatized hospitals**, which includes countries that adopted bolder, private sector models for organizational reform. The best way to think about this is as a continuum between budgetary units and private units with autonomous hospitals closer to budgetary units and corporatized hospitals closer to private ones.

Organizational reforms change five aspects of hospital organizational structure. First, organizational reforms increase the decisionmaking autonomy of hospitals. Second, hospitals are exposed to market pressures to replace certain resource allocation and planning processes. Third, hospitals are allowed to keep their savings but are also required to balance their budget and perhaps to earn profits to give owners a return on the capital invested in hospitals. These three instruments are designed to trigger improvements in efficiency and client responsiveness.

To ensure that nonmarket objectives are not undermined as hospitals are exposed to increasingly greater market mechanisms, two additional instruments are often introduced. New accountability

mechanisms are adopted to retain ability to influence hospital behavior for nonmarket objectives. Finally, to counterbalance the potential negative impact of marketizing reforms on the poor, social functions are made explicit. Remember, however, that the main policy lever for achieving social objectives for health care access is the health financing mechanism and a proactive purchaser that monitors access of the population.

---

## **Autonomy**

---

***Autonomy is the right to make decisions over various aspects of production, including inputs, outputs, and process.***

The degree of autonomy (decision rights) hospitals have provides the first key element of organizational structure. Most significant decision rights can be grouped around the categories of inputs, outputs, and management processes. Where hospitals are operated as part of the government bureaucracy, key decision rights are exercised by government bureaucrats, and there are few at the level of the organization.

This means even in an external environment that encouraged good performance, hospitals would not have the means to do so. For example, a hospital director may want to change the skill mix of her staff but civil service regulations may prevent her from doing so. In a public bureaucracy, many decisions require authorization from the higher level of the hierarchy that may take a long time, require a discouragingly complex process of filling out forms, or both. In many cases, regulatory and bureaucratic constraints, not lack of funds, stand in the way of good initiatives.

The problem with such allocation of decision rights is that government bureaucrats who make the decisions are far removed from hospitals and thus often lack critical information to make those decisions. At the same time, the people who have the information—hospital-based physicians and managers—do not have decision rights. This mismatch between information and decision rights is at the heart of poor performance of public sector hospitals.

Thus, the first key element of hospital organizational reform is to increase the autonomy of public hospitals. Autonomy is important because it provides the critical instrument that enable organizations to respond to incentives. When designing organizational reform, the important question is “How much autonomy should hospitals have?” More specifically, “Which decision rights should be allocated to the hospital?” and “Which decision rights should the government bureaucracy retain?” Table 1 summarizes the key decision rights to be allocated.

**Table 1. Key decision rights to be allocated**

Inputs	Outputs	Outcomes	Process/management
<input type="checkbox"/> Labor (hiring, firing, remuneration) <input type="checkbox"/> Capital (investment in and sale of assets including land, buildings, equipment) <input type="checkbox"/> Other inputs (procurement of consumables, including drugs and supplies and small equipment)	<input type="checkbox"/> Level of throughput <input type="checkbox"/> Mix of services	<input type="checkbox"/> Targets for specific health outcomes	<input type="checkbox"/> Strategic management <input type="checkbox"/> Financial management including setting user charges <input type="checkbox"/> Clinical management <input type="checkbox"/> Administrative processes

During the design and implementation of organizational reforms, countries are faced with difficult dilemmas over granting decision rights to hospitals, particularly over (i) labor, (ii) capital assets, and (iii) setting user fees.

**Decision rights over labor issues.** In many reforming countries, civil service regulations blocked efforts to increase hospital directors' autonomy over hiring, firing, and staff remuneration. Removing civil service regulations from the health sector, however, proved to be difficult. Although pay is lower than for private physicians, civil service status affords fringe benefits, job security, and official grievance procedures. In fact, in most reforming countries, governments were faced with opposition from unions and associations of health care employees who insisted on attractive benefit packages in exchange for supporting the reforms. At the same time, Ministries of Finance insisted on cost-neutral switch. In most cases, compromises were made, and grandfather clauses were included in the personnel benefit design. In many cases, they allowed voluntary transition to noncivil service status in the initial years, offered improved compensation for those who transferred, and phased transition over several years. (table 2)

**Table 2. Design of employment packages in Hong Kong, Singapore, Malaysia**

	Staff benefits (+/-)	Phasing (years)	Voluntary (Y/N)
Hong Kong	+	3	Y
Singapore	+	1	Y
Malaysia	+	2	Y

### Box 1. Staffing issues in Malaysia

Malaysia corporatized the Heart-Institute (IJN) in 1992. Staff retention was a main reform objective. It was decided to move all the staff from the Cardiology and Cardio-thoracic Units of Kuala Lumpur General Hospital to the newly corporatized hospital. Staff, especially more senior ones, worried about their service benefits (e.g., pensions and under-the-table payments) after leaving government service.

To ensure that IJN would have enough workers to start its service, government staffs were given three options:

- a. Resign from government service by taking early retirement and joining IJN;
- b. Be seconded to IJN for two years while retaining civil service benefits;
- c. Reject the offer to join as IJN staff and remain in the civil service.

Those who chose option a or b and joined IJN were offered two salary increments and an additional increase in their base salary: 25 percent for the professional group, 15 percent for clinical support staff and 12 percent for administrative staff. Staff selecting option B were allowed to be seconded for a maximum period of two years, at the end of which they had to decide either to join IJN permanently, or resign and return to government service. Senior workers above 40 years of age who chose option A or B would not lose their entitlement to pensions and gratuities obtained as civil servants while working in government service.

Out of 315 staff, 298 selected Option A; one chose Option B, and 16 preferred Option C—mainly due to the higher salary that IJN was able to offer compared to the government pay scale. During its first year of operations, an active recruitment program nearly doubled the number of staff by the end of 1993 to a total of 459. Recently, there has been a move to hire employees on a renewable contractual basis, to allow both the Institute and staff greater flexibility in resource management.

Source: Hussein et al, 2000

**Decision rights over capital assets (physical).** There are two issues related to capital: decision rights over selling existing capital stock and acquiring new capital investments.

*Selling existing capital stock.* Of the reforming countries, the more radical reformers transferred decision rights over selling physical assets to the provider level. This means that hospitals were allowed to close and sell parts of their infrastructure. Countries in this group include Singapore, Malaysia, New Zealand, United Kingdom, Hong Kong, Australia. These countries were ones that more actively pursued the market oriented approach. Less radical reformers kept such decision rights with the government including Indonesia, Tunisia, Ecuador, Argentina, etc.

Transferring decision rights over assets to hospitals creates greater sensitivity to the fixed costs of their operations. Maintenance and fixed costs of facilities (heating, electricity) is expensive and often takes up a large portion of available budgets. It is expected that transfer of decision rights in this realm provides incentives to rationalize the infrastructure (i.e. layout) if efficiency gains are achievable.

It has to be mentioned, however, that among the reviewed countries, closing hospital facilities was not an explicit objective of organizational reform with the exception of a few cases. For instance, Victoria, Australia experienced significant reconfiguration of infrastructure and services (box 2). In the United Kingdom, hospital reconfiguration took place using mergers and networks

to promote internal rationalization—in a similar way to Victoria. But the United Kingdom has kept steady downward pressure on hospital bed numbers for the past 20 years, starting well before the beginning of organizational reforms: corporatization appeared neither to slow nor to speed this steady downsizing.

The counterargument is to retain decision rights over infrastructure at the government level to ensure rational planning of the distribution of facilities. Autonomization and corporatization do not remove the need for coherent planning of major capital investments in hospitals or for an allocation mechanism for recurrent and investment funding. Market mechanisms are often weak in the hospital market and do not lead to efficient allocation of resources without government intervention. Even in countries with largely private delivery of hospital services, planning or capacity regulation are often found to be useful adjuncts to other mechanisms for managing demand.

Retaining control over the sale of government-held assets is another means of ensuring geographic access. The case can be made that if assets are to be sold, government should do it in order to redistribute some of the proceeds of the sales—some hospitals inherit more valuable surplus assets than others and may not have the highest priority claim on the revenue from their sale. For example, the United Kingdom balances incentives with equity and other priorities by allowing the local hospital and the region to retain part of the proceeds of asset sales.

#### **Box 2. Hospital closures in Victoria (Australia)**

In 1992, the Victorian Parliament's Economic and Budget Review Committee noted substantial scope for efficiency gains through hospital amalgamations; hospital closures; hospital-use conversions; and health services specialization.

In 1995, Victoria's Kennett Government restructured metropolitan health care services, combining 32 independent, publicly owned and operated hospitals in Melbourne into just seven health care networks. Each network had between 2 and 9 hospitals. Acute care hospitals were combined with other acute hospitals and with nonacute providers. Network boards were given decision rights over reconfiguration of physical infrastructure and services.

In the four years after their establishment, the networks closed 9 hospitals and reconfigured the operations of several more. Unfortunately, there are no published estimates of any cost savings from these changes. However, Inner and Eastern Health Care Network estimated that by closing Burwood and District Hospital it could use the savings to provide twice as many inpatient services at the nearby Box Hill hospital. In addition, surplus assets were sold and the proceeds retained by networks, allowing them to deliver more services within their existing budgets.

*Source: Corden, 2000*

*Funding new capital investments.* No country has granted *full* decision rights over new capital investments to public providers, and investments continue to be predominantly publicly financed. (See discussion under market exposure about access to private capital markets.) In fact, in many countries, resource allocation decisions for investments are still made separately from resource allocation decisions for operational expenditures. Even among the most radical reformers, few countries purchase care or services with an explicit portion for capital stock and replacement costs. Criteria for investment vary but are often tied to political criteria as well as other criteria related to demand, need, or supply.

**Box 3. Integrating capital and operational expenditures in Australia**

There have been some moves to incorporate capital into the output-based funding arrangements. Grants to replace plant and equipment are now largely output based. Decisions on plant and equipment, accounting for an estimated half of the total depreciation expense, are made at network level and have increased the scope for substituting between capital and other inputs. Grants for major capital works, including replacing buildings and expanding capacity, remain submission based and are evaluated centrally by government.

*Source: Corden, in Preker and Harding eds, 2003*

Various attempts have been made to increase providers' flexibility with regard to strategic capital decisions. This is important for efficiency, which requires flexibility to substitute between capital, labor, and other inputs. The first such attempt is to integrate part of the capital funding stream with that of operational expenditures. The second is to set value ranges within which providers can procure equipment without permission. Box 3. illustrates this issue with an example from Australia.

**Decision rights over setting user fees.** In some countries that have introduced organizational reforms, increasing cost recovery from user fees was an important part of reform, aiming to replace public with private resources. Indonesia, Singapore, Malaysia, and Hong Kong illustrate the point. This issue is discussed later in more detail in the section on social functions and residual claimant status, but here it should be mentioned that the question of where to delegate the right to set user fees turned out to be very important. If a country is to introduce user fees, should hospitals be allowed to set user fees or should the government (Ministry of Health) retain this function?

Proponents of allowing hospitals to set user fees expect that it to foster competition among providers, which will hold down the prices. This was the line of reasoning in Singapore. When corporatized hospitals showed higher unit costs, this was explained by higher quality of services. Some argue that the high tech equipment race to attract patients boosted unit costs in Singapore's corporatized hospitals.

Many other countries left the fee-setting function at the Ministry of Health. Aside from Singapore, concerned about runaway fee increases and the impact on the poor. They did not want people to see organizational reforms as the government's reneging on its responsibilities to provide health care. This is what happened in Hong Kong, Malaysia, and Indonesia

Although there is no recipe regarding the optimal allocation of decision rights, there are three principles to guide design of hospital reforms.

- ❑ Align decision rights and **external pressures** to ensure that those who have the autonomy to make decisions will also face good incentives and vice versa. (box 4)
- ❑ Transfer decision rights over day-to-day management where the **information** is to ensure that the decisionmakers have the necessary information.
- ❑ Prepare **management** to take advantage of greater autonomy (section 5)

#### **Box 4. Misalignment of decision rights, incentives, and information: lessons from Eastern Europe**

Many countries in Eastern Europe have not systematically considered what would be an appropriate allocation of decision rights. This can be illustrated through the case of Hungary. In Hungary, as in many other transition economies, a key objective of health reform was to improve efficiency by reducing excess capacity in the health sector. This was to be achieved through new purchasing arrangements founded in case-based provider payment mechanisms. Output-based payment to hospitals were expected to give hospitals incentives to downsize and lay off excess staff.

Automatic downsizing and efficiency gains did not occur, however, as external incentives and organizational incentives were contradictory. Hospitals did not have decision rights over the physical assets of the hospital (buildings and land), and had only limited autonomy over staff. Decision rights over the former were allocated to local governments in 1990, and decision rights over staff are restrained by civil service regulations. So even if hospitals had wanted to respond to the new financial incentives, they did not have the means to do so.

In contrast to hospitals, local governments do have decision rights over physical assets and thus they could have sold their hospitals. However, for political reasons, they lacked incentives to do so. The local electorate perceives hospital closures as a loss of assets for the community and as a failure by local government to fulfill its legal (sometimes constitutional) mandate to deliver services. As a result, old input-use patterns persist, despite changes in external incentive structures and increasing financial pressures.

Source: Jakab et al, in Preker and Harding eds, 2003

## **Market exposure**

*Market exposure refers to subjecting hospitals to competition in the product and factor markets. In the product market, market exposure means that hospital revenues are linked to performance. On the factor market, market exposure means that hospitals compete for inputs, including physicians and capital.*

**Product market.** Increasing market exposure on the product market means that the hospital's revenues become more dependent on its ability to attract and keep patients. In budgetary units where hospitals are fully funded through a historical public budget, treating more patients or providing better quality services has no implications for the hospital's revenues. Conversely, pervasive public sector problems such as absenteeism of public doctors (due to private practice, for instance) and waste have no negative implications for hospital revenues. Market exposure creates a direct link between performance and revenues and thereby makes the hospital *economically* interested in improving performance.

Increasing market exposure means linking parts of hospital revenues explicitly to performance. This can be achieved either by (i) increasing cost recovery of hospitals through user fees, or (ii) changing the external purchasing arrangements to reflect money-follows-the-patient payment mechanisms (or both).

Countries where organizational reform is designed to reduce the burden of financing on the public budget usually rely on the mechanism of market exposure. The hospital is typically allowed to collect and keep user fees and decide upon their use. The Ministry of Health may or may not retain the fee-setting function and supervising exemption schemes. (See discussion under

decision rights.) Indonesia, Malaysia, Singapore, Kenya, and several other cases reviewed chose increased reliance on user fees (box 5).

The debate over the pros and cons of cost recovery is so well known that here we review only two relevant points from the perspective of organizational reforms. The first finding is that the expectation that increasing hospitals' market exposure through reliance on user fees has rarely materialized. Even in cases where hospitals were able to collect more revenues from private sources, public sources may not show a commensurate decline. The Heart Health Institute in Malaysia is a case in point.

What explains this finding? If market exposure works as intended, it increases the hospital's productivity. If hospitals want to increase their revenues, they can do so by seeing more patients. One implication is that they are likely to invest in medical technology that will attract more patients. Such technology is costly and the payer-purchaser in the system cannot always resist the pressure of corporatized hospitals (often channeled through the political system) for public funding of such investment requests. Moreover, as hospitals see more patients, private resources increase but the public share of treatment also increases (e.g., drugs). This depends on the kind of payment mechanism used, but increased cost recovery in several countries has been associated with increased pressure and use of public funding as well (section 4).

Equally importantly, user fees undermine equity and financial protection. As providers become increasingly concerned with their financial viability, they may seek out patients with greater ability to pay and may become more reluctant to provide unremunerated (or not fully remunerated) care. Internal cross-subsidization among patients or services will cease to be a viable mechanism for ensuring access to important services or to needy members of the population. As a result, problems of equity and access for the poor may emerge, unless complementary reforms are introduced to social functions and purchasing to ensure the delivery of services for which hospitals are not directly and fully paid.

For these reasons, several countries chose to increase market exposure through the provider payment mechanism rather than through user fees. This meant adopting money-follows-the-patient payment mechanisms—for example per diem, per admission, case-based, fee-for-service—that reflect the hospital's performance. (We review payment mechanisms in section 4 and appendix A.) Money-follows-the-patient payment mechanisms have similar effect on hospital behavior as user fees in terms of fostering productivity. However, their source is public funds rather than individual pockets. This allows productivity to be encouraged without undermining access.

### Box 5. Increasing cost recovery in Indonesia

Indonesia proposed to reform some of its public hospitals in the late 1980s. This initiative was intended to secure additional private resources for health, thereby freeing up government funds for reallocation to promotive, preventive, and other public health services. Public hospitals that met certain criteria could be designated autonomous institutions, *Lembaga Swadana*.

Within certain guidelines, Swadana hospitals were authorized to increase or reduce fees and were given residual claimant status (to retain revenues). This was a departure from the requirement that fee-based income be channeled directly to the central, provincial, or district bodies that owned the facilities. And Swadana hospitals were allowed to use fee-based revenues to improve services and facility utilization and, in that way, to augment future fee-based funding prospects. Thus, income from fees could be spent on drugs and medical consumables, recruitment of new employees and staff incentives, and contracts with private service providers. Revenue from fees, which could not be used to finance civil works and equipment, had to be integrated, together with conventional government grants and payments, into the annual funding proposals submitted to central, provincial, or local authorities.

The government set specific entry criteria for corporatization, recognizing that not every hospital had the capacity to operate successfully under Swadana rules. Hospitals would be eligible if the cost-recovery rate had increased during the previous three years and exceeded 40 percent, if the bed occupancy rate was 70 percent or higher for centrally owned hospitals and at least 60 percent for province and district-owned facilities, if the average length of stay was 10 days or less, and if their surrounding communities were prosperous enough to pay for medical services. Strong support from hospital administrators and central Ministry of Health or local government officials was also a prerequisite.

Besides mobilizing additional private funds and reducing government subsidies to the hospital sector, the Swadana approach was tasked with important social goals. The initiative was expected to make hospital services more accessible and affordable for the poor, to improve staff morale and motivation, and to strengthen links to local communities. To assure coverage of the poor, the health ministry mandated that class III wards, which provide the most basic services for the lowest fees, account for at least half of the beds in each facility

Fee-based income increased in all of the hospitals covered in the present study (Swadana and non-Swadana) thanks to increased bed turnover and relatively inelastic consumer demand. Bed occupancy rates and other efficiency indicators tended to rise in the Swadana hospitals. While the Swadana approach appears to have had little impact on staff pay packages overall, hospital and personnel directors felt that staff discipline and motivation had improved while absenteeism had fallen. The net impact on the poor remains unclear.

*Source: Lieberman, et al, in Preker and Harding eds, 2003*

Implementing money-follows-the-patient payment mechanisms has similar implications as user fees: as the new payment mechanism begins to work and hospitals increase their productivity, total costs increase unless a strong purchasing function is developed to prevent cost escalation.

These hypotheses seem to be confirmed by the country cases. Increased pressure on total health expenditure, associated with rising hospital activity, was a feature of the more market-oriented organizational reforms (Singapore, Malaysia). This does not appear to have undermined support for the reforms in these countries, perhaps due to the small scale of implementation in Malaysia or due to success in the objective of attracting additional nongovernmental revenue. It did, however, lead to a second wave of reform to introduce stronger mechanisms for cost containment. In New Zealand and to a lesser extent the United Kingdom, cost containment was a predominant concern and led to compromises in policy design in an attempt to mitigate this risk, which in turn attenuated incentives for improved performance.

**Factor market.** The two most significant input factors where public hospitals do not compete are the labor market and the capital market. Regarding the former, eliminating or reducing civil service constraints on personnel policies and removing central planning of human resource capacity are the instruments adopted in several countries. However, these changes are often contentious and politically difficult.

Allowing public hospitals to access capital markets is equally contentious. The conflicting objectives in consideration are easing the burden of public budgets and creating incentives to consider the cost of capital on one hand and preventing risky borrowing or excessive capital expansion on the other. The advantage of allowing hospital to access private capital markets is that private capital can ease the political pressure on governments over allocation of scarce public investment funds by allowing decentralized access to alternative revenue sources. Borrowing can be used to restructure short-term financing needs into long-term liabilities, which makes providers aware of the cost of capital and introduces additional control and monitoring pressure through lenders. Since private capital lenders mostly care about their repayment, using private capital reduces the influence of political factors on capital allocation decisions. As a result, use of capital is more likely to be productive. Moreover, borrowers have to repay the money, this obligation is often thought to motivate tighter financial discipline among providers.

#### **Box 6. New Zealand: Exposure to Private Capital Markets**

Crown Health Enterprises (CHEs) in New Zealand are encouraged to borrow from the private capital market. In support of this objective, the Treasury charges CHEs above-market interest rates to encourage restructuring of their debt from public to private. CHE borrowing does not enjoy sovereign guarantee, and CHEs must disclose this in their private sector borrowing agreements. This was expected to lead to rigorous monitoring of overall performance by lenders thereby resulting in greater fiscal discipline and more efficient use of capital investments.

However, the government has continued to finance cash deficits, restructuring costs, and urgent capital expenditure, often in the guise of equity injections to maintain solvency. Shareholder ministers have underwritten the performance of CHEs by providing shareholder support. In addition, personal responsibility of managers for running a deficit has been lax. The turnover of CHE chief executive officers was so high that their personal reputation did not suffer from nonrenewal of their contracts or firings. As a result, CHE deficits have continued to grow.

Continued soft budgets had two implications. First, soft budgets weaken the effect of other incentives to achieve efficiency gains as they reward poor performers and penalize those who reduce costs. Second, soft budgets send signals to lenders and investors and weaken their incentives to monitor provider performance. Despite the required disclaimer in loan agreements that the Crown does not provide sovereign guarantee, soft budgets send the opposite signal that the government will not likely allow providers to go bankrupt. Thus, at the end, private lenders perceived CHEs debt as government guaranteed. This has weakened lenders' monitoring incentives, one of the main reasons private lenders were preferred in the first place (even though private capital is more expensive than public capital which is often subsidized).

*Source: Scott, et al, in Preker and Harding eds, 2003*

The disadvantage of allowing public hospitals to access private capital is that private lenders tend to perceive an implicit government guarantee—they assume that the government as owner of the hospital will always bail it out if it has difficulty paying private lenders. Offering public hospital assets as security to lenders is unrealistic, because disposing of excess capacity in the health

sector is difficult. As a result, some limits have to be placed on private borrowing by public hospitals. Some vetting of major investments may be needed to limit the growth of physical infrastructure and to protect governments from the risk that hospital borrowing for large capacity-increasing projects that do not result in commensurate gains in efficiency. Thus, to the extent that governments do not enforce hard budgets, the financial discipline expected from exposure to private capital markets is undermined.

### **Residual claimant status**

*An organization’s residual claimant status reflects the degree of enforced financial responsibility—both the ability to keep savings and responsibility for financial losses (debt).*

In government-operated hospitals paid through line-item budgets, the public purse is often the residual claimant: If hospitals generate extra revenues, save, or cannot spend their budgeted allocation, the funds are withdrawn from hospitals and reallocated within the health sector budget.

At the same time, in budgetary units, budgets are "soft." The term "soft" refers to the lack of enforced financial responsibility: the public purse steps in and bails out the loss-making organization. Such conditions are hardly conducive to generating savings and efficiency gains because soft budgets reward poor performance through additional resources and penalize those who save. Thus, the third element of organizational reforms is to clarify who the residual claimant on revenue flows is: the hospital or the public purse.

Several factors determine the residual claimant status of the organization (hospital). The first one relates to the external environment: the provider payment mechanism. When payments to hospitals are based on historically determined line-item budgets, the public purse automatically becomes the residual claimant (table 3). In such cases, if hospitals save money, they will be allocated less the next year, as it is deemed that the funding is not needed. Any other payment mechanism makes the hospital residual claimant unless in the absence of regulations to the contrary.

**Table 3. Interaction between payment mechanisms and residual claimant status**

	Public purse	Hospital
Historical line-item budget	✓	
Global budget		✓
Fee-for-service		✓
Capitated		✓
Case-based		✓

The second determinant of the residual claimant status relates to the explicit regulations and implicit practices of the government regarding the use of surplus funds. Some cases hospitals do not have the capacity to spend their full allocations, and the public purse might quickly withdraw the unspent funds and reallocate them to hospitals that can spend them. Finally, whether hospitals can keep user fees they collect is another key determinant of their residual claimant status. Thus, organizational reforms often remove regulations that require hospitals to return their extrabudgetary revenues and savings to the public purse.

Autonomous hospitals established as not-for-profit entities retain all of their surpluses. Corporatized hospitals usually have to pay dividends or other forms of capital charges to owners. Thus, residual claimant incentives appear stronger for the not-for-profit autonomous hospitals—but at the price of weaker incentives to optimize assets and liabilities and exercise greater managerial discretion.

#### **Box 7. Allowing hospitals to keep collected fees in Malaysia**

Malaysia corporatized its National Heart Institute (IJN) in 1992. It is 100 percent government owned and operates as a corporatized unit. IJN has been self-financing with payments from both private patients and the government to cover government-sponsored patients. Collecting fees from all patients, however, is not always easy. Some private patients reneged on their responsibility to pay the institute for services rendered; to the point where the institute is carrying RM11 million in unpaid bills. This has been a delicate situation as IJN, ever conscious of its social responsibility, did not want to be accused of being interested only in the bottom line. Nevertheless, management has acted to recover these bad debts through the credit control unit of the finance department, an external debt-recovery firm, and ultimately through the courts of law. Private patients are now required to pay a deposit on admission or must produce a guarantee letter from their employers. Despite these difficulties, every year operating revenue has exceeded operating expenditures.

*Source: Hanan, et al, in Preker and Harding eds, 2003*

The benefits of making hospitals residual claimants are entirely undermined if **hard budgets** are not enforced. Soft budgets reflect rewards financially undisciplined organizations, create moral hazard in the system, and are unfair to those who exercise fiscal discipline.

#### **Box 8. Enforcing hard budgets in the Czech Republic**

During the 1990s, hospitals in the Czech Republic began to accumulate debt to their suppliers and utility companies, as in several other countries in Eastern Europe. The Czech government, resisted direct budget transfers to fund the surplus, however, and loss-making hospitals were provided a loan from the government-owned consolidation bank. Their loan request was approved under the condition that they submit a service- and revenue-restructuring plan to demonstrate future financial viability and including a repayment schedule for the loan.

*Source: Jakab et al, in Preker and Harding eds, 2003*

Enforcing hard budgets is a challenge for many governments. First of all, it requires political commitment that often wanes under popular pressure to keep hospitals open and increase their funding. Second, financially unviable hospitals may be strategically important service providers in a given catchment area, and their closure may not be desirable. Thus, in the public hospital sector, enforcement of hard budgets is not taken seriously, unlike in the private sector, where loss-making enterprises are exposed to bankruptcy and closure. Alternative sources of hospital income include loans from public or private sources. The latter, however, requires functioning financial markets, which many low- and middle-income countries do not have.

## Accountability

*Accountability refers to holding hospitals responsible and answerable for their behavior and performance.*

As the autonomy of providers increases, the ability of the Ministry of Health to assert direct accountability through the hierarchy diminishes. Direct hierarchical accountability is typically manifested as control over employees and through the application of administrative and civil service law. With organizational reform, alternative accountability instruments are put in place through indirect mechanisms such as boards, contracts, and regulations and their consistent monitoring and enforcement. This requires the health ministry, purchasers, and other (perhaps new) regulatory agencies in the health sector to take on new functions and roles.

Various indirect accountability instruments can be adopted between the hospital and each of its external actors: patients, payers, owners, and regulators. Since each of these actors may have a different objective for hospital behavior, adopting a mix of these instrument can ensure that these multiple goals are met or at least monitored. Table 4 lists various accountability instruments between the hospital and external actors.

**Table 4. Key accountability instruments**

Between hospital and patients	Between hospital and payers	Between hospital and owners	Between hospital and regulator
<ul style="list-style-type: none"> <li>❑ Effective and accessible patient grievance procedures</li> <li>❑ Community representation on hospital boards</li> </ul>	<ul style="list-style-type: none"> <li>❑ Published independent audits</li> <li>❑ Contracts with explicit performance objectives</li> <li>❑ Monitoring and disseminating comparative provider performance information</li> </ul>	<ul style="list-style-type: none"> <li>❑ Hospital boards representing community and business leaders</li> <li>❑ Business plans</li> </ul>	<ul style="list-style-type: none"> <li>❑ Minimum standards</li> <li>❑ Outcome measures</li> </ul>

A key challenge for many countries is to design functional boards that provide mechanisms to hold hospitals accountable.

**Boards.** First the role, mandate, and functions of hospital boards must be considered. Two kinds of roles emerge from the case studies reviewed. The Board of Directors can be a **representative body** ensuring that the different, often conflicting interests of stakeholders are represented and heard. This includes functions such as providing voice to community views and preferences; seeking donations and volunteers from the community, providing links to philanthropic organizations; lobbying for political support; and advising hospital management on business issues. Boards of this nature tend to be larger and participate little in the decisionmaking process.

The other function a board can play is closer to that of a **strategic body** that makes strategic decisions for the hospital and holds the management of the hospitable accountable for their performance. These boards are usually smaller, and their members are selected for their skill in making strategic and funding decisions for the organization.

Once the board's role has been decided, more specific questions have to be asked. What profile should the board members have? Should they be appointed or elected? Should they be paid or unpaid? Table 5 summarizes how four countries answered these questions and structured their hospital boards.

#### Box 9. Board of Malaysia's IJN

The National Heart Institute is governed by a nine-member Board of Directors comprising senior officials from the Ministries of Finance and Health, the private sector, three representatives from the National Heart Institute (the chief executive officer (CEO) and the two executive directors) and the chairman of the board. Board members are appointed by the finance ministry, with advice from the health ministry. Government representatives sit on the board by virtue of their position in office, but the appointment of other members are by no means automatic or permanent. In the six years of IJN's operations, the chairman and private sector members of the board have changed. Board members need not necessarily have a medical background—they are seen as resource persons to help infuse the paradigm shift toward more business-like efficiency in the institute. The board is the institute's final decisionmaking body.

Reporting to the Board of Directors are the Management Committee, the Audit Committee and the Professional Advisory Committee. An external private firm (Ernst & Young) conducts IJN's internal audit. The appointment of the chief executive officer is recommended by the Board of Directors, with approval from the Ministry of Finance. The CEO's initial three-year contract has been renewed twice, so the same CEO has managed the Institution since its inception. She is a physician with a postgraduate degree in hospital administration. Prior to this appointment, she served as a hospital director in Johor Bahru Hospital. The Medical, Administration and Finance Divisions are under her direct management. Recently, a new post of medical director has to oversee the professional aspects of care, while the CEO concentrates on issues of administration and finance.

**Table 5. Characteristics of hospital boards, selected countries**

Country	Number of board members	Role and composition of board	Selection	Paid
Australia	Maximum 9	Executive and strategic—members selected for business skills	Appointed	Paid
United Kingdom	Maximum 11	Executive and strategic—5 nonexecutive positions and 5 hospital executives	Appointed by Regional Health Authority, Secretary of State	Paid
Tunisia		Executive—represents medical staff from hospital	Chairman elected by MOH, CEO not part of the board	Unpaid
Malaysia (IJN)	9 members	Executive/strategic — Senior government officials from the MOF, MOH, private sector, executives from IJN	Government officials Appointed by MOF on advice of MOH	Unpaid

MOH Ministry of Health; CEO chief executive officer; IJN National Heart Institute

**Box 10. Accountability arrangements for New Zealand’s Crown Health enterprises**

Four principal accountability arrangements attend the Crown Health Enterprises (CHEs) in New Zealand.

- **CHE chair and board members.** These officers are engaged by the ministers, usually through a simple letter of engagement, lacking any explicit expectations. It is an accountability lever with some potential to be used more effectively. Recently, a systematic process for reviewing the performance of board members has been developed, clarifying expectations and creating a feedback mechanism.
- **Statement of intent.** The statement of intent is prepared under the Public Finance Act, submitted to the minister, and tabled in Parliament. The general purpose of the statement, required for all Crown entities, is to communicate to Parliament the main purposes and direction of the organization. The CHEs do not always consider the statement of intent an important document, which partly reflects weaknesses in performance monitoring against these documents by the Parliamentary Select Committees and the ministers. It is, however, an important safeguard in a democracy against abuse of power or poor performance by the executive branch of government.
- **Business plan.** The CHE agrees on a business plan with the ministers: The plan contains the objectives, projected capital expenditures, plans for service changes, changes in asset configurations, projected revenues, projected costs, and the financial forecasts. This is the most salient accountability document, carrying considerably more weight with CHE boards and management than the statement of intent or the purchase contract. Significant failures to meet business plan fiscal targets usually mean problems for the board and chief executive officer, sometimes resulting in the removal of the board chair and subsequently, the CEO.
- **Purchase contract.** The CHEs receive about 90 percent of their revenue from the government purchaser through purchase agreements or other arrangements. These purchase agreements are legally based contracts between the CHE and the government for the delivery of specified services at agreed prices. The purchase contracts held little weight with CHEs initially. When contract breaches have occurred, the parties have not taken strong action. Despite being separate legal entities, essentially these contracts were de facto internal government contracts. The threat of enforcement has lacked credibility, due to lack of competition and reluctance to go to court. On occasion, parties were strongly pressured by ministers or central agencies into signing contracts that the parties knew left major issues unresolved or which contained unrealistic provisions.

---

## Social functions

---

*Social functions refers to providing services to patients where the marginal cost of producing a socially valued service is greater than the marginal revenue the hospital receives for rendering the intervention.*

As organizational reforms are motivated by the objective of improving efficiency and user satisfaction, other health sector objectives such as equity and financial protection might be neglected. *Social functions* refers to the responsibility to cover services and populations where revenues do not cover costs. In such cases, hospitals may discourage the use of such services directly or indirectly. At either end of the spectrum are unspecified and unfunded social functions versus funded mandates with an explicit cross-subsidy for services and populations where revenues do not cover costs.

First, reformers need to identify social functions. A hospital organizational reform should include a concerted attempt to distinguish hospital services that are pure private goods from services that fulfill a social function and to define and subsidize the social functions of the hospital. To the extent that this effort is successful, the chances of achieving clear improvements in hospital performance are greatly increased.

Reasonable people can disagree on the "socialness" of a hospital service. Some people would argue that all care for noninfectious disease is a "private good," because it primarily benefits the recipient, and that anyone who does not pay for it can be inexpensively barred from consuming it. Others would counter that treatment of chronic disease in the poor fills the social function of providing a safety net for the most destitute. Still others argue that access to all health care services is a human right, which the government cannot morally deny to any citizen and therefore all health care is social good.

Even if it agreed that a service is not a pure private good, the government can subsidize or purchase this social good at marginal cost. In some countries, social insurance systems or tax-financed purchasers have the role of purchasing health care for the poor, and social insurance or budget funds are used to purchase infectious disease control program—so that these services are no longer "social functions" from the perspective of the hospital. This requires, however, that government allocate sufficient revenue to services it identifies as serving a social function.

---

## Organizational modalities

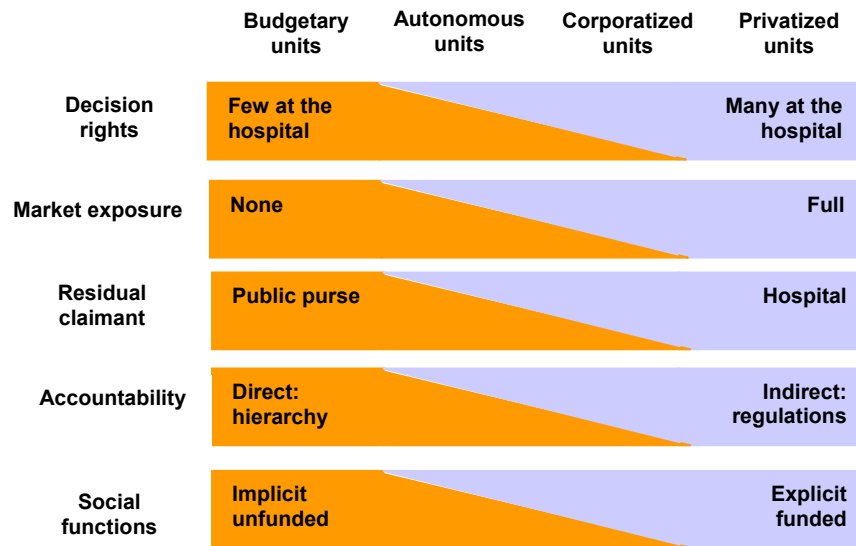
---

Putting together the above five dimensions of the organizational structure, four organizational modalities can be characterized (figure 3). At the one end of the spectrum is hierarchical **budgetary units**. At the opposite end is **private organizations**. In between are two additional organizational forms that are increasingly being applied to public hospitals. Closer to budgetary units is **autonomous** public hospitals; **corporatized** public hospitals are closer to private units. The characteristics of each of these will be reviewed.

For all the dimensions, moving from budgetary units toward private units implies not a change in magnitude but rather a change in the nature of organizational structure. For instance, the issue is not whether accountability is more or less stringent, moving from budgetary to corporatized units—the nature of accountability changes from direct hierarchical control to indirect control enforced through contracts and regulations. Similarly, moving from budgetary to corporatized

units, decision rights increase over certain but not all aspects of hospital operations: autonomy over inputs increases but, at the same time, contracts and strong purchasing reduce hospital autonomy over outputs. Thus, figure 3 cannot be readily interpreted on a numerical scale.

**Figure 3. Organizational modalities and organizational structure**



### Budgetary Units

Until recently, the predominant organizational form of public hospitals was that of budgetary units, which refers to hospitals run as a government department. Hospitals have little **autonomy** over key decisions such as staff mix and size, services offered, technology used, accounting and financial management methods, salaries, and so on. The manager of such a hospital is essentially an administrator. The government’s hierarchy of officials and rules control all strategic issues and determine most day-to-day decisions related to production and delivery of services.

The public sector is the **residual claimant** of the hospital operating as a budgetary unit. In general, the government determines the revenue of the hospital. Revenues are determined through a direct budget allocation, which is commonly set in relation to historical precedent and input-based norms. Any nonbudgetary revenues and savings belong to the public sector—and must either be returned to the public purse for reallocation or spent as directed. On the other hand, losses are also covered by the public purse. **Market exposure** is low or nonexistent with centralized procurement and distribution of drugs and other medical supplies, and lack of competition among providers.

**Accountability** is enforced through direct hierarchical control through a chain of government bureaucrats. However, governments’ objectives in running the hospitals are often unrecorded—and unmonitorable. Bureaucrats responsible for monitoring hospital and managerial performance tend to focus on inputs—especially on monitoring spending according to line-items. The **social functions** performed by the hospital are not distinguished from their other activities—nor are they funded separately.

### **Box 11. Albania: Example of a budgetary unit**

Hospitals in Albania function as budgetary units and receive input-based line-item budgets from the government.

#### **Decision rights**

- ❑ *Personnel.* Doctors are employed directly by hospitals and hired by the hospital director. Doctors are salaried employees. Although civil service status and law does not exist, salaries are controlled by the Ministry of Finance. The Ministry of Health (MOH) determines overall number of personnel employed in the health sector.
- ❑ *Capital assets.* The MOH owns the hospitals—hospital management does not have the autonomy over the disposition of hospital assets. Capital investments are funded from the central budget. Large investments were made in medical equipment during the 1990s from central budget resources without regard to how future operational expenditures will be covered. The MOH determines the allocation, a process influenced by political bargaining and informal personal networks. There is no medium-term investment planning except for donor resources. The MOH still must approve purchase of small equipment.
- ❑ *Other inputs.* Autonomy over nonlabor and noncapital input (drugs and consumables) has been increased and a law on public procurement has been introduced

#### **Residual claimant**

"Savings" result when poor managers do not spend their budget allocations, and these funds revert to the central budget. The MOH often reallocates unspent funds before the end of the year to the hospital most likely to be able to spend them so that it remains within the sector. Hospitals are allowed to charge copayments, but these are often forgone for informal gratuity payments. Hospitals often run up debts with their pharmaceutical supplier, a semipublic enterprise. Since hospitals do not always have to pay in cash, postponing payment acts as a safety valve for the MOH and the hospitals. Eventually, the MOH steps in and pays the pharmaceutical company's deficit. MOH pressure on hospitals to refrain from running up debt results in a high turnover of directors

#### **Accountability**

Hospitals must report on their financial performance regularly to the MOH: whether the money is being spent according to itemized allocation. The MOH has no real capacity to verify reports.

#### **Market exposure**

Hospitals receive most of their funding from the budget, so they are not exposed to the market. Copayments are the only official user charges. Provider competition for patients is limited to informal under-the-table payments. On the factor market, some competition is emerging among hospitals for medical school graduates—especially among hospitals in the rural areas that are having a hard time offering attractive employment conditions.

#### **Social functions**

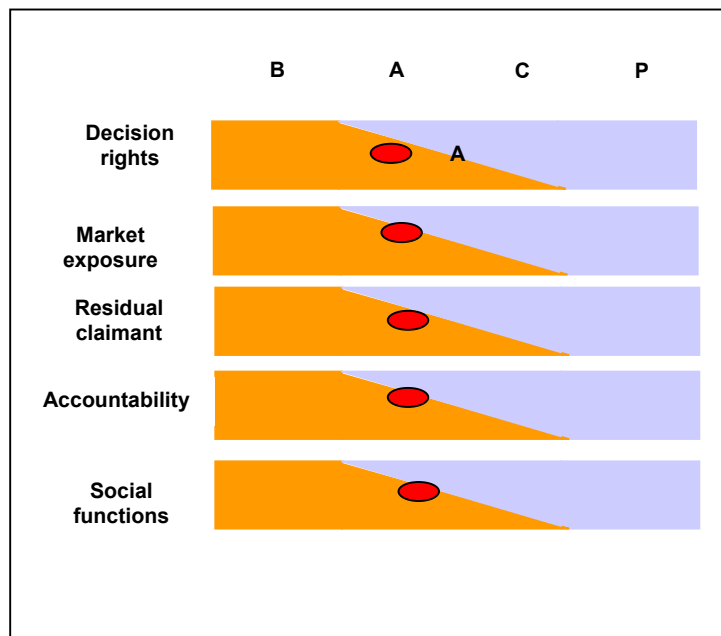
There are no explicitly defined social functions.

### Autonomous Public Hospitals

Kenya, Uruguay, Indonesia, Tunisia, and many other countries have experimented with increasing the autonomy of their public hospitals. Policymakers opted for these reforms because the most serious efficiency and quality problems were seen to be rooted in the management's pervasive lack of control over resources (especially labor) and production. Autonomization of such organizations focuses on "making managers into managers"—by shifting many day-to-day **decision rights** from the hierarchy to the organization. Autonomization in the health sector has led to a wide variety of arrangements. The amount of autonomy actually given to the management has varied considerably. Most governments have been unwilling or unable to transfer control over labor, recruitment, salaries, staff mix, and the like and have instead left employees in the civil service.

The hospital or clinic becomes a partial **residual claimant** on certain savings generated through cost savings or other improvements. These changes are often accomplished by slightly increasing **market pressures** on the organization through widening the scope for generating revenue through service delivery. This may be achieved by moving toward funding via performance-related payments, by allowing paying patients to be served, or by allowing copayments to be charged. Additional revenue opportunities only motivate if revenue can be retained. Therefore autonomization reforms increase the scope for retaining revenue within the organization. Often this is partially achieved by moving from a line-

**Figure 4. Organizational structure of autonomous hospitals**



item to a global budget, whereby savings in one service or budget area can be shifted to another.

**Accountability** arrangements still generally come from hierarchical supervision. However, objectives are more clearly specified. Usually the scope of the objectives is narrowed, and focus on economic and financial performance increases. An agreement between the government and the hospital management may be concluded with monitorable performance targets. Responsibilities for performing **social functions** may be specified in the agreement.

### Box 12. Uruguay: experimenting with hospital autonomy

Most public hospitals in Uruguay are budgetary organizations, run as departments of the Ministry of Health. The government of Uruguay is piloting a “broader” interpretation of the public hospital legal framework to empower the managers of four hospitals with some degree of management autonomy: Maldonado, Salto, Tacuarembó, and Las Piedras.

**Decision rights.** Under new management agreements, the manager of the future pilot hospitals can nominate, promote, and dismiss staff, but cannot change the staff mix, set by quotas on each category of employment. The manager has broad authority over supplies and investment (within a fixed investment budget) and can contract-out or sell services to third parties and enter into reciprocal collaboration agreements with private providers;

**Market exposure.** Pilot hospitals are still financed through input-based, historically set budget, but they now have freedom to execute the budget with a significant degree of autonomy, meaning that savings in one budget-line area can be reallocated to another. Moreover, starting next year, each pilot hospital will have both the prerogative to prepare the budget and the responsibility for drafting it. The budget is then negotiated with the central level on the basis of the expected outputs. In addition, public hospitals can charge private and social health insurance carriers for services provided to their beneficiaries.

**Residual claim over revenues.** Pilot hospitals are encouraged to collect fees from the beneficiaries of social and private insurance and may keep up to 80 percent of revenues for investment and maintenance, but not for redistributing among staff. There are no special provisions for what happens in the event of a deficit, although it is assumed that the budget would cover the loss;

**Accountability.** Pilot hospital managers are appointed and supervised by a deconcentrated department within the Ministry of Health. The hospital manager enters into a management agreement with this department, which includes performance indicators covering output (productivity), input/output (efficiency), and process quality. Again, the agreements are silent on what happens for failure to meet the agreed targets.

**Social functions.** The mandate to provide for the poor and for other social functions is explicit in the pilot management contracts, but the mandate is not explicitly funded, since the budget is based on inputs and set historically. However, hospital performance indicators are based exclusively on services provided to the poor and uninsured, thereby focusing management responsibility on the targeted poor and uninsured population. Services rendered to insured patients are not counted in hospital evaluations, but failure to recover costs from insurers is a strike against the hospital.

### Corporatized Public Hospitals

Corporatization reforms have attempted to mimic the structure and efficiency of private corporations while keeping ownership, de facto, in the public sector. The most comprehensive corporatization reforms were implemented in Singapore, New Zealand, Victoria (Australia), the United Kingdom, and Hong Kong.

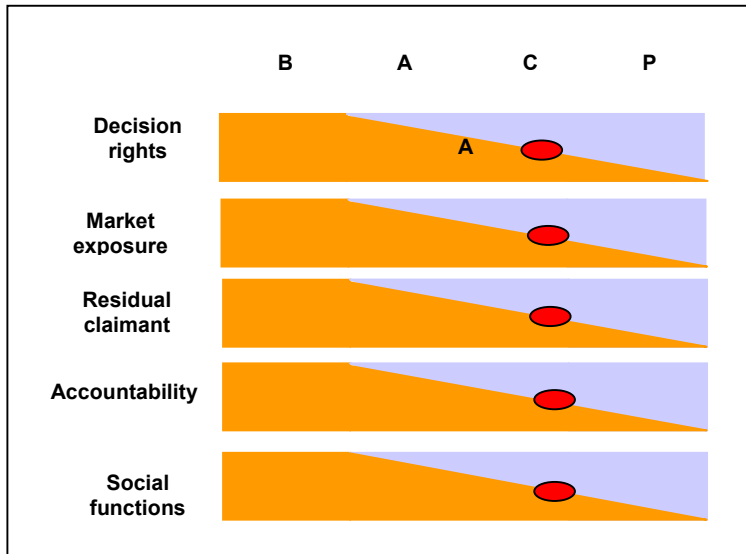
Corporatized hospitals are established as separate legal entities with a corporate organizational structure. In Singapore, New Zealand, and Malaysia, hospitals were established as companies under private company law and made subject to competition law and other commercial law applying to private companies. They were established with a balance sheet and assigned a debt and equity structure simulating private corporate financial structures. This approach was not adopted in Hong Kong, Tunisia, or Indonesia, and recent policy changes in United Kingdom have moved away from a corporate financial structure to a simpler capital charge regime.

Under corporatization, provisions for managerial **autonomy** are generally much stronger than under autonomization, giving managers virtually complete control over all inputs, outputs, and processes. The organization is legally established as an independent entity and hence the transfer of control is more durable than under autonomization.

The corporatized hospital—in theory at least—is much more a **residual claimant** than is the autonomized hospital. It can retain excess revenues—although it may be required to pay dividends or capital charges to its owner—but is also responsible for losses. The independent status includes a hard budget constraint or financial bottom-line—which makes the organization fully accountable for its financial performance, including management of assets and liabilities, with liquidation as the outcome in case of insolvency. Management’s greater latitude is complemented by market pressures as an important source of incentives, crucially including contracts with purchasers and some element of competition or contestability. These **market incentives** stem from the combination of an increased portion of revenue coming from sales (rather than budget allocation) and increased possibilities for keeping and using extra revenue, as well as from the hard budget constraint.

Accountability mechanisms are anchored in the creation of a Board of Directors and a *corporate plan*, which is a binding agreement between the hospital (and the board) and the relevant supervisory agency that carries out the role of owner or shareholder of a private company. This corporate plan contains financial performance targets such as profit or rate of return on assets or equity, dividends and reinvestment policy. These targets usually require the hospital to earn sufficient commercial returns sufficient to justify the long-term retention of assets in the organization and to pay commercial dividends from those returns. In a corporatized hospital, directors (board members) usually have absolute responsibility for the performance of the hospital and are fully accountable to the responsible minister. They are sometimes responsible for bringing operation of the hospital into conformity with world best practice (where appropriate, after adjusting for noncommercial government requirements). Reviews, including comparison with this benchmark, are part of the corporate plans.

**Figure 5. Organizational structure of corporatized hospitals**



However, this emphasis on economic performance necessitates alternative arrangements to ensure the continued delivery of **social functions** (services previously cross-subsidized). Under corporatization, these are usually pursued through purchasing, insurance regulation, demand-side financing, or mandates that apply to all organizations, not just public facilities. Rather than force hospitals to deliver services below cost to a poor citizen, for example, an appropriate subsidy may be delivered to either the patient or the hospital.

### **Box 13. Singapore: example of a corporatized hospital**

**Background.** Singapore has 10,500 hospital beds in 24 hospitals, 3.5 beds per 1,000 population. Of these beds, 80 percent are in public hospitals ranging in size from 200- to 2,500-bed facilities. Most private hospitals are small, with 60 to 500 beds each. Within the public hospitals, Singaporeans have a choice among the different types of wards and accommodations upon admission. Of the public hospital beds, 70 percent are in heavily subsidized hospital wards. The other 30 percent of the beds are in private rooms or semiprivate rooms with 4 beds each. The more amenities patients want, the more they pay, but the medical care is similar for every type of accommodation.

Since 1985, five acute care hospitals and six specialist institutes have been corporatized as a unit or group. These hospitals were incorporated under the Health Corporation of Singapore (HCS). The HCS is Singapore's largest healthcare provider, accounting for 45 percent of hospital beds and half of all admissions in the country (5,000 beds and more than 200,000 admissions). The corporation employs more than 12,000 people. The stated objectives of hospital restructuring were to improve control over public expenditures by increasing competition and individual responsibility, to improve the quality of hospital services, and to improve working conditions for government health personnel.

**Decision rights.** Restructured hospitals are fully autonomous and are empowered to recruit their own staff, set their own terms of remuneration, and decide on the deployment of resources. A restructured hospital has much more autonomy than a government hospital to manage its own operations.

**Accountability.** The management of a restructured hospital is accountable to the Board of Directors for the hospital's performance. Corporatized hospitals are subject to broad policy guidance by the government through the Ministry of Health. A Board of Directors, consisting of top government appointments and all the chairmen of its subsidiary companies, provides operational direction. Its mission statement is: "To own and manage an efficient network of health care institutions through which an excellent level of health and medical care is provided to our patients in the most cost-effective manner." In the process, commercial accounting systems have been introduced to give a more accurate picture of operating costs and motivate tighter financial discipline and accountability.

**Market exposure.** Hospitals raise 40 percent of their revenues from nonbudgetary sources.

**Social functions.** The restructured hospitals continue to provide care to subsidized patients and receive an annual subvention or subsidy from the government to offset their operating deficits. In this, they are different from the other private hospitals.

## Privatized Hospitals

Privatization is the most extreme version of marketizing organizational reforms. It entails transferring a public hospital to private ownership, either as a for-profit or nonprofit organization. Nonprofit privatization is conceptually quite distinct from for-profit privatization.

Privatization naturally removes the hospital from all direct control of the hierarchy of government officials and public sector rules. The organization is thus fully independent of the hierarchy, although the management is likely quite constrained by the new owners. All incentives come from opportunities to earn revenue, and the incentives are relatively strong, since private owners or shareholders are the residual claimants on extra revenues, now called profits. These two forces combined drive the high-incentive features of this model—complete exposure to a market to earn revenue and owners who are strongly motivated to capture the revenues and monitor the management.

The owners of a privatized hospital have at their disposal the full range of institutions that have developed to ensure good governance or monitoring relations between the owner and manager in private corporations. Dissatisfied owners can express their views—through selection of board members or, more commonly, through divestiture. Declines in share prices or dividends can alert owners or boards to poorly performing management. The market for managers also puts performance pressure on management to maintain their reputation and employment.

Anticipation of problems in dealing with profit-maximizing providers is leading many countries to explore nonprofit privatization as an alternative. This consists of transferring or converting a public hospital to a nonprofit, which significantly alters the model. The ownership is private, so the hierarchy does not directly control the hospital in any way. However, in some countries, regulatory requirements to maintain nonprofit status and hence subsidy eligibility mean that the government retains certain “control” rights.

### **Dysfunctional reform design**

In nearly a dozen case studies, all successful cases are characterized by consistency in the five key elements of their organizational structure. The less successful cases are characterized by moving some of the five “dial-settings” to markets while leaving others at budgetary units. This observation suggests that consistency in the dial-settings matters more than how progressive or bold the reforms are. In other words, if bold reforms are implemented in one aspect of organizational structure (e.g., granting extensive decision rights and increasing market exposure), bold reforms also have to be implemented in the other aspects of organizational structure (e.g., accountability) as well as in the external environment (e.g., purchasing and regulation).

Inconsistencies in dial-settings not only prevent expected reform benefits from materializing but can also do harm by creating dysfunctional organizations. In support of this case, four common design flaws emerge from the country cases (figures 4A–4D).

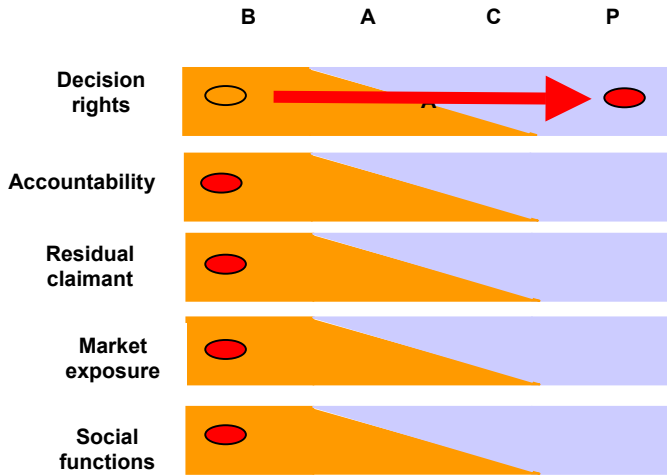
- A. In some countries, organizational reform has been limited to granting increased autonomy to hospitals. We have emphasized that organizational reform requires a comprehensive change along at least five dimensions of organizational structure and is not limited to increasing the autonomy of providers. Associating organizational reform with increasing autonomy only and forgetting about accountability creates the first type of dysfunctionality. In such cases,

neglecting accountability structures results in loss of government control over the organization's behavior, in particular, over meeting nonmarket-based objectives.

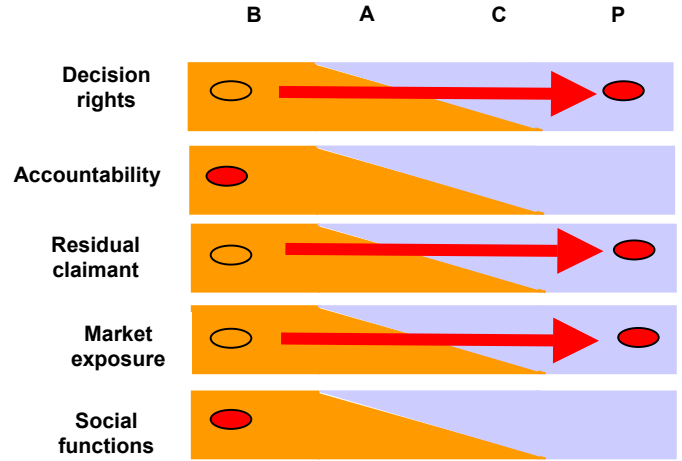
- B. Market incentives (market exposure and residual claimant status) are pursued aggressively, but explicit definition of social functions is forgotten. Such situations invariably reduce access for the poor. Training, research, and public health services may also be neglected unless these are explicitly purchased or subsidized.
- C. Exposure on the product market is increased by collecting user fees and making hospitals residual claimants, but rigidities over staffing issues, lack of overall managerial independence, and impact on the poor are left unaddressed. This happened in **Indonesia** where the designers did not address the issue of provider payments, nor did they tackle such critical public sector rigidities in resource allocation as restrictions on staff appointments, redundancies, and pay. Weaknesses in implementing regulations to protect access for the poor cut the number of subsidized beds for the poor.
- D. Another type of dysfunctionality is created when autonomy is transferred to the organization and new accountability instruments (e.g., contracts) are put in place, but no emphasis is placed on market incentives (market exposure, residual claimant status). In such cases, although hospitals could improve their performance, they have no reason to because performance differentials (positive and negative) are not recognized (by rewards or penalties). This was the case in **New Zealand** where, although initial design was consistent, various aspects of reform were reversed after a change of government. Governance reforms based on overtly commercial and private sector legislative models were modified and market exposure was reduced, in response to opposition by Left-of-Center political parties.

Figures 4A–4D. Organizational structure of dysfunctional hospitals

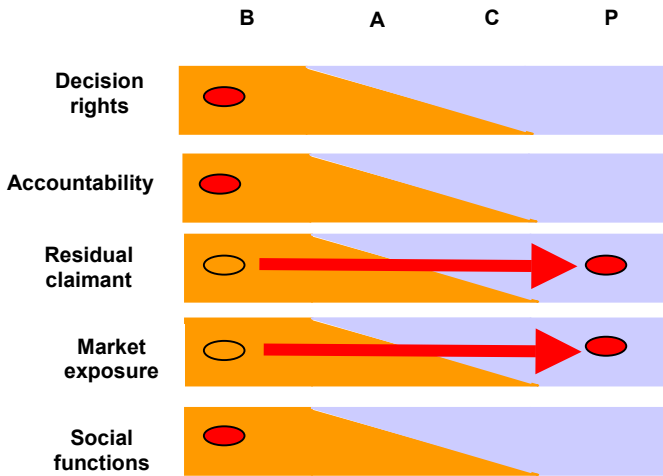
4A.



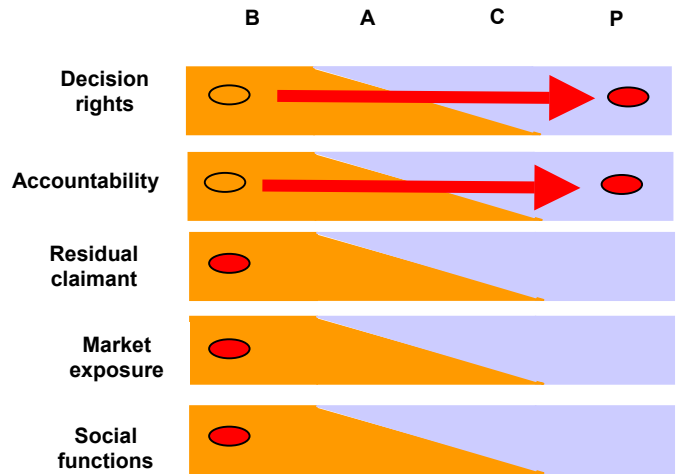
4B.



4C.



4D.



## 4. IMPROVING HOSPITAL PERFORMANCE THROUGH EXTERNAL PRESSURES

Now we focus on understanding the key elements of the external environment that have a significant impact on hospital behavior and thus on the outcome of organizational reforms. In the previous section, we reviewed extensively how autonomization and corporatization change the organizational structure of hospitals and how these changes are expected to help improve performance. However, we also argued that the outcome of organizational reforms often hinges upon the external environment in which hospitals operate. We presented several examples where the anticipated outcome was not achieved because no complementary measures were applied in the external environment, or, conversely, where external measures strengthened the outcome of organizational reforms. This interaction between organizational structure and external pressures makes hospital organizational reforms complex *systemic* reforms that cannot be designed and implemented in isolation from other components of the health system.

In this section, we review four reform instruments that can be applied to the external environment of hospitals to reinforce the outcome of organizational reforms. The first instrument is strengthening government oversight, *stewardship*, in the recently popular term. The second instrument is the creation of a proactive strategic purchasing function to counterbalance the loss of direct control over reformed hospitals. The third instrument is the challenge of introducing market pressures in a functional way. The final external reform measure is enhancing the role and involvement of owners in hospital operations.

### Strengthening government oversight

Three key elements strengthen government oversight: developing a policy framework, creating and enforcing an effective regulatory framework, and gathering intelligence.

#### Developing a policy framework

Organizational reforms are complex, and their success requires a consistent policy package. Organizational reforms are so complex because a number of mutually reinforcing changes have to be implemented concurrently not only within the hospitals but also in the systemic environment beyond the hospital. A successful policy framework creates a roadmap for the reform while leaving room for flexibility to adjust to unexpected contingencies and make needed compromises. The following three points seem to be important components of a reform package (see table 6 for a more comprehensive list.):

- ❑ **Setting well-defined objectives.** To ensure choice of the right instruments, the reform objectives must be clearly defined. Organizational reform is an instrument to improve efficiency and quality of services but not equity and financial protection (section 2). Well-specified objectives are also important to measure the success of the reforms to maintain political credibility. In some cases, implementation may follow a broad statement of intent; in others the intentions of policymakers may be set out in detail.
- ❑ **Ensuring internal consistency and coherence.** Successful reform of complex systems depends on the internal consistency and coherence of the overall policy framework. Consistency and coherence relate partly to whether the different components of the proposed reforms have been adequately specified and partly to the relationship of these components to

each other as part of the reform package. Even if these issues are addressed at the design stage and the dial settings are aligned appropriately, implementation deficits may crop up. These may arise because policymakers depart from their plans during the implementation phase of reform, or because the context into which the reforms are introduced is hostile. Actors may also try to delay or divert implementation because their interests are adversely affected. Policy coherence may be compromised, for example by bargaining and negotiating in coalition governments.

- **Matching scale and pace of reform design with institutional capacity.** Judgments about content must also be informed by an assessment of the capacity of existing organizations to deliver the proposed reforms. In this context, capacity refers both to the availability of trained staff and to the provision of infrastructural support such as information systems. These issues are particularly important in developing countries with shortages of managers and others with skills needed to implement reform (Bennett, Russell, and Mills 1999). Capacity building is also an issue in developed countries where policy involves a turning hospitals that are managed as budgetary units in bureaucratic hierarchies into corporatized entities. If the same personnel are employed in the new regime as in the old, they may need training and development to take on the responsibilities expected of them. This applies to staff involved in purchasing and market regulation as well as the managers of hospitals and other provider units.

A vision or a reform plan may contribute to successful implementation, but it should not become a "straightjacket." Many aspects of reforms change during implementation. In fact, several cases illustrate the benefits of flexibility to adapt and develop design settings during implementation in response to emerging issues. In the United Kingdom this was achieved by adopting an initial policy framework that was more a broad-brush statement of policy intentions than a detailed blueprint, and by implementing reform in several waves. In Singapore and Malaysia, this opportunity was created by the decision to begin by piloting change in a single hospital. Singapore, Malaysia, and the United Kingdom progressively adapted provider payment mechanisms in response to problems or limitations in the initial approach.

**Table 6. Success and failure in planning and managing reform implementation in New Zealand and Singapore**

<b>Instruments for Planning &amp; Managing Implementation</b>	<b>New Zealand: Planning Actions Contributing to Failure</b>	<b>Singapore: Planning Actions Contributing to Success</b>
Macroanalysis of the ease with which policy change can be implemented	Multiple implementing agencies with conflicting roles and views. “Big bang” implementation, before assessment of hospital financial viability No budget for transition costs.	Single holding company to oversee change. Phased implementation, beginning with pilot project; rollout to hospitals likely to succeed.
Making explicit values underlying policy	Opposition to user charges damaged support for organizational reform. Weak constituency building for change.	Public support for financing reform benefited organizational reform. Active public information campaign, responding to public criticism.
Stakeholder analysis	Fiscal stringency constrained income for health professionals at the time of reform implementation. No financial inducements offered to “oil the wheels.”	Significant salary increases for doctors in corporatized hospitals.  Personnel offered protection of civil service pay and conditions during transition.
Analysis of financial, technical and managerial resources available	No training or management development provided. Weak information systems hampered provider payment reform.	Financial and administrative for fee-for-service payments already in place when hospitals were corporatized.
Build strategic implementation process	Existing managers and clinicians excluded from implementation design. Little consultation over change. Reactive, not proactive, fine-tuning.	Active participation of many sectors: health professions, community, employers, unions. Two-year public debate of issues.

## **Regulatory challenges**

The main regulatory challenge with regard to organizational reform is to rethink the regulatory framework governing the operation of reformed hospitals. As long as hospitals are operated as part of the core public bureaucracy, they are subject to the laws and decrees governing the operations of all core government entities. It is important to ensure that the new regulations applicable to hospitals are clear and rigorous. An unambiguous regulatory framework can go a long way toward making up for the loss of direct control over hospital operations implied by organizational reforms.

The government has two options when rethinking the regulatory framework. The first one is to bring hospitals under the regulations that govern various parts of the broader public sector. For instance, hospitals can be subjected to the law governing the operations of autonomous public agencies or state-owned enterprises. That was the what happened in New Zealand where public hospitals were established as Crown-owned companies, incorporated under company law. Ministers held the shares and appointed the board members. The model of Crown-owned companies for hospitals was an adaptation of the earlier reform of government-trading activities into state-owned enterprises.

The second option is to design new legislation specific to the reformed hospitals. For instance, in Hong Kong the Legislative Council passed an ordinance that created the Hospital Authority, a

public nonprofit corporation, responsible for managing public hospitals on behalf of the government. The ordinance, specifically designed to govern the operation of the Hospital Authority, sets forth its objectives, responsibilities, and lines of accountability.

If existing legislation is well designed, this option brings hospitals under regulatory discipline that has already been tested in other sectors of the economy, a decided advantage. The disadvantage is that these regulations do not take into account circumstances peculiar to the health sector. This means that certain aspects that make sense in the productive sectors cannot be enforced in the health sector. To stay with the example of New Zealand, the state-owned-enterprises are allowed (even encouraged) to borrow from the private sector but without sovereign guarantee, which has to be disclosed in the loan agreements. However, shareholder ministers financed deficits to maintain solvency often masked in the form of equity injections. (box 6). This example illustrates that while the existing regulation designed for the productive sectors stipulated hard budgets, it was not enforced when applied to the hospital sector.

Bolder reforms require better thought-out regulatory framework. The success of corporatization relies heavily on the level of development of private institutions and framework law governing the private sector. Corporatization implies shifting the organization from a framework of administrative law and control to a legal and regulatory framework of private sector company law, contract law, and competition policy. If the institutions (customs, norms, courts) of the private sector are dysfunctional, corporatization may shift responsibility to a vacuum and make performance even worse.

In addition to redesigning the regulations governing hospital operations, two areas of complementary regulation are important: labor market deregulation and hospital licensing, accreditation, and certification.

We have talked extensively about labor market deregulation in section 3 but the key points are worth repeating. Because labor costs make up a substantial portion of hospital expenditures, efficiency gains are unlikely if the hospital does not get control over that key input. Transferring decision rights over labor issues to hospitals is problematic if health care personnel are employed as civil servants. They may be attracted to the potential of higher pay, but often they are also reluctant to give up job security and other benefits of government employment and therefore object to such proposals. As reviewed in section 3, reforming governments end up making political compromises to gain a buy-in from health care employees.

Licensing, accreditation, and certification are the most commonly practiced approaches to regulation of the quality of health care. Although these three terms are often used interchangeably, in a health care context these methodologies refer to very specific regulatory approaches with sometimes subtle, yet very important, differences. Licensing prevents entities (facilities or personnel) that lack minimum qualifications or structure from delivering medical services. Accreditation and certification are public "seals of approval" of the technical practices of health care facilities and personnel, based on rational criteria. Public recognition, accreditation, and certification increase patients' ability to judge a provider's technical quality. In requiring compliance with a well-developed set of quality standards, the processes of accreditation and certification not only rate technical performance but also provide facilities and caregivers with important information on practices that improve the care delivered. The following definitions further delineate the differences among the three processes:

- **Licensing** is the process by which legal permission is granted by a competent authority, usually public, to an individual or organization to engage in a practice, occupation, or activity

otherwise unlawful (e.g., a license to practice medicine and surgery). A license is usually granted on the basis of examination and proof of education rather than on measurement of actual performance. A license is usually permanent but may be conditional on annual payment of a fee, proof of continuing education, or proof of competence. Grounds for revocation of a license include incompetence, commission of a crime (not necessarily related to the licensed practice), or moral turpitude.

- ❑ **Certification** is the procedure and action by which a duly authorized body evaluates and recognizes (*certifies*) an individual as meeting predetermined requirements, such as standards. Certification programs are generally nongovernmental and do not exclude the uncertified from practice, as do licensure programs. While licensure is meant to establish the minimum competence required to protect the public health, safety, and welfare, certification enables the public to identify the practitioners who have met a higher standard of training and experience than required for licensure.
- ❑ **Accreditation** is the formal process by which an authorized body assesses and recognizes an organization, program, or group as complying with requirements such as standards or criteria. For example, accreditation by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) in the United States is a determination that an eligible health care organization complies with applicable standards. Certification is essentially synonymous with accreditation, except that certification is applied to individuals (such as certifying a medical specialist), whereas accreditation is applied to institutions or programs (such as accrediting a hospital or medical education program).

Such regulations pose two issues for hospital organizational reform. The first one is that the farther the hospital is from the core bureaucracy, the stronger is the regulation required to protect consumers. The second issue concerns the potential for tension between existing regulations on accreditation and licensing and the new reform plans. It is essential to ensure that the existing rules do not undermine the organizational reform objectives. More specifically, in some countries licensing regulations prescribe hospital inputs in detail and thus restrict the possibilities for autonomous hospitals to make efficiency gains by changing the input mix. .

## Gathering intelligence

The very fact that organizational reforms are complex and often contentious makes it practically and politically imperative to articulate clear, measurable reform goals and to monitor progress toward them. Accordingly, strengthening the roles and capacities of the supervisory agencies and purchasers can contribute to more sound reform design and implementation. Unless hospital organizational reform demonstrably achieves at least a portion of its intended effects, the general public, which might benefit from those achievements, will lose interest in the reform and opponents of the process will gain control.

Critical to the success of effective accountability arrangements—a key component of changing organizational structure—is monitoring and enforcement. However well contracts or regulations are designed on paper, if provider behavior is not monitored and contracts and regulations are not enforced, these structures will have little impact. Monitoring and enforcement hinge on clear objectives and monitorable indicators for measuring and rating performance. (See appendix C for specific measures and indicators for hospital performance) This requires development of a new—more proactive—role for organizations in the external environment of hospitals including payers, government, and patients.

Key steps toward sound monitoring systems include:

- ❑ Defining the reform program’s political, strategic, and operational **goals** and definition of **measurable indicators** to evaluate whether the goals have been attained. The monitoring template should contain indicators that facilities can realistically collect and whose validity can be verified.
- ❑ Defining monitoring indicators of impact for all the key dimensions of performance—technical and allocative efficiency, equity, quality—as part of the reform design process **before implementation.**
- ❑ Setting **benchmarks and targets.** This can be done by looking at the national distribution of indicators or international comparison with countries at similar stage of development.
- ❑ Developing **intermediate indicators** of changes in the form of changes in hospital behavior.
- ❑ **Institutionalizing monitoring** as part of the role of purchasers or supervisory agencies, or both.

#### Box 14. Performance monitoring in Victoria, Australia

The Planning Board envisaged that the new governance regime would lessen focus on detailed monitoring of inputs and processes and increase focus on outcomes. In practice, the Department of Human Services kept a close watch on the networks and required:

- monthly electronic reporting to the department of financial and performance data by each network and hospital
- analysis by the department of defined qualitative and quantitative indicators against benchmarks
- regular discussions between the department and individual hospitals on budget and performance issues.

There seems broad agreement that since the 1980s the department has gradually moved from detailed controls of inputs (while still actively monitoring financial aggregates) to more active monitoring of output performance. Quality indicators are still relatively undeveloped, while access indicators include waiting times for elective surgery and emergency treatment, by category of patient. Indicators developed to date have focused on surgery waiting times and emergency care, rather than chronic and other nonacute care and as such are not yet entirely consistent with the Planning Board’s emphasis on nonacute care. Anecdotal evidence suggests that most network boards are still more comfortable addressing financial, efficiency, and throughput issues than those related to quality of care. The external monitoring regime, including performance indicators and the targets against which they are held accountable, have tended to reinforce this.

Most countries where organizational reforms have taken place have faced severe limitations in assessing the performance impact on providers and on the entire health system. Thus, there are few robust analyses evaluating performance impact of organizational reforms.

Evaluating and monitoring organizational reforms is not easy. First, countries may choose to reform only a limited number of hospitals that are not chosen for high probability of success. This makes it difficult to carry out a statistically robust comparison of performance across reforming and nonreforming hospitals.

Second, the impact of hospital organizational reform is difficult to isolate from other linked reforms carried out in parallel—to purchasing, provider payment, new investment. Where autonomization or corporatization take place as part of a purchaser-provider split, the important performance dimension of allocative efficiency depends critically on, for example, the

purchaser's performance. Or, the impact of subjecting hospitals to greater market exposure on equity depends on complementary measures in health financing and purchasing.

Finally, practical and political reasons undermine evaluation and monitoring efforts. There may not be a system in place to collect data on unit costs and quality, especially in developing countries with limited institutional capacity. Developing information collection systems takes time and resources, and organizational reforms take time to show results. Therefore, politicians may feel that time spent trying to evaluate reform results is wasted in terms of their short time horizon, the next election.

---

## **Creating strategic purchasing**

---

Purchasing is the second complementary reform that may influence the outcome of organizational reforms. *By purchasing we mean the health system function whereby collective (pooled) resources are allocated to providers who deliver health services to the population on whose behalf resources have been collected.* Thus, a Ministry of Health passing on a budget to providers is a purchaser of health services in this sense, and so are social insurance funds or private insurance companies. Globally, between 50 percent and 60 percent of total health spending—US\$2,830 billion in 1998—is channeled through such collective purchasing arrangements.

The core policy feature of purchasing is whether it is passive or strategic. Passive purchasers act as “cashiers” for providers. They pay providers without evaluating the efficiency or effectiveness of their product, without exercising selectivity in the interventions they fund or in the providers they buy from. Most of the time, passive purchasers follow a historical pattern of resource allocation. In contrast, *“[s]trategic purchasing involves a continuous search for the best ways to maximize health system performance by [operationally] deciding which interventions should be purchased, how, and from whom.”* (World Health Report 2000).

Strategic purchasing involves identification of (i) the beneficiary group covered by collective resources; (ii) the service package to be funded from collective resources; (iii) the providers to purchase services from; and (iv) the mechanism by which providers are reimbursed for their services. In answering each of these questions, the stewardship function should play a strategic role in setting the direction and role of the purchasing function to make this vision operational.

Of these four strategic purchasing components, we focus on the latter two because they interact critically with organizational reform. This does not mean that the first two are not important but that they do not have a critical interface with organizational reform.

### **For whom to buy?**

Identification of the beneficiaries of collective purchasing arrangements is a key step in moving toward strategic purchasing. In many countries, the beneficiaries of collective purchasing schemes are not clearly defined, a lacuna that often contributes to their unsustainability. In an ideal system, where there strong interaction occurs between stewardship and purchasing, the steward defines the strategic mandate of who is covered—typically to include the poor, the unemployed, and the elderly—while the purchaser has to identify and distinguish them from the rest of the population. In contrast, in a system with weak stewardship, the purchaser defines

beneficiaries. If the system is based on competition in purchasing, the purchaser responds only to demand, and therefore the market determines the population. How well the beneficiary population is defined contributes to both access and financial sustainability.

## What to buy?

Strategic purchasing of services is a two-stage process. The first stage is inseparably linked to the stewardship function and is based on a society's core values. We call this package the **strategic**

### Box 15. Creating proactive purchasers in the United Kingdom

In the United Kingdom, establishment of hospital Trusts was accompanied by strengthening the purchaser function. The arrangements centered on Health Authorities and general practitioner fundholders. Initially, Health Authorities were responsible for the purchasing function, but the reform process allowed general practitioners to become fundholders, and they were allocated a budget to purchase a limited range of services for their patients. These budgets were deducted from the allocations of the relevant Health Authorities. Fundholders continued to work alongside other general practitioners who preferred not to take responsibility for a budget and who instead advised Health Authorities on where services should be purchased.

- ❑ **For whom to buy?** Overall, the UK reforms did not change the population coverage—purchasers continued to purchase for the entire population. Initially, Health Authorities purchased services for populations of around 300,000 on average, although mergers between authorities increased the size of the population served over time.
- ❑ **What to buy?** Within the mandates of the National Health Service (NHS), purchasers were free to determine the service volume and mix they contracted for with providers. These contracts grew increasingly specific and complex as purchasers began to accumulate experience and data.
- ❑ **From whom to buy?** Sector neutrality was created by allowing purchasers to purchase equally from public and private providers depending on who offers better value for the money.
- ❑ **How to pay?** At the initial stages of purchasing, simple block contracts were used, specifying the total amount of resources and the volume of services to be provided. With time, the payment mechanism tended toward more complex case-based payments.

As time went on it became clear that the internal market in the NHS was in a reality a managed market in which politicians were reluctant to allow competitive forces free rein. Purchasers were permitted to make changes but were required to give advance notice of plans to move services and contracts to avoid harmful disruption. Purchasers were often reluctant to use their leverage to improve performance. This was illustrated by the extensive use of block contracts by Health Authorities which offered little advantage over the global budgets they replaced and meant that, in practice, money rarely followed patients. General practitioner fundholders were more inclined to use cost and volume and cost per case contracts and to “shop around” to get the best deal for their patients but they, too, were often loyal to their local NHS Trusts and in many cases were not inclined to move to alternative providers.

**benefit package.** The strategic package sets out priority service areas for the health system based on social goals. Often, these goals conflict and trade-offs have to be made. For example, considerations of cost-effectiveness often lead to exclusion of high-cost but low-frequency events, which are nonetheless important for financial protection against the high cost of unexpected illness.

The second stage is definition of the **operational benefit package.** The service benefit package makes the strategic package operational by clearly defining the services that conform to the priority areas set out by the strategic service package. The definition of both packages is

extremely complex considering the paucity of information on the impact of services and different benefit packages on health system goals.

### From whom to buy?

Many countries have been experimenting with reforms of the purchaser-provider interface. The common feature of these reforms is increased reliance on provider performance information in purchasing decisions. Clinical quality, efficiency, consumer satisfaction, and financial risk are among the aspects of provider performance increasingly considered by purchasers.

Such a selective approach toward providers, however, is not always feasible for two reasons: purchasers may not have a mandate to contract selectively and may be required to have funding agreements with all public providers regardless of their performance; or even when purchasers can selectively contract, the provider market may not be competitive. Thus, the market structure between purchasers and providers limits the scope of competitive pressures in the short run.

Even in such cases, however, purchasers may become more strategic in their approach to providers by using provider performance information to introduce performance pressures. This can be done through mechanisms such as contestability, yardstick competition, and competitive bidding for certain services. We focus on various approaches to increasing market pressures on the provider market in the next section.

### How to pay?

We have emphasized in a number of cases the critical link between organizational reform and the provider payment mechanism. In all the more successful organizational reform cases, the payment mechanism was structured to reinforce incentives for efficiency and user satisfaction. (table 7)

**Table 7. Organizational reform and provider payment mechanisms**

	<b>Organizational form</b>	<b>Provider payment mechanism</b>
Argentina	Autonomous	Line-item budget
Indonesia	Autonomous	Global budget
India	Autonomous	Global budget
Malaysia (IJN)	Corporatized	Fee-for-service
United Kingdom	Corporatized	Various: global budget, fee-for-service with volume cap; case-based
New Zealand	Corporatized	Various: Global budget with targets, case-based with volume cap
Hong Kong	Corporatized	Global budget with mandated efficiency savings
Australia	Corporatized	Case-based with volume cap
Singapore	Corporatized	
Kenya	Corporatized	Global budget

Typically, this meant a move from historical—sometimes even input-based—budgeting to some kind of performance-related payment mechanism such as a case-based payment, global budget

with volume and quality targets, or per diem. Table 8 summarizes the incentives embedded in various payment mechanisms, discussed in detail in appendix A

**Table 8. Hospital payment mechanisms, financial risks, and incentives**

Payment mechanism	Basket of services paid for	Risk borne by		Provider incentives to			
		Payer	Provider	Increase number of patients	Decrease activity per consultation	Increase reported severity	Select healthier patients
Fee-for-service	Each agreed item of service and consultation	All	None	✓	X	✓	X
Case-based	Payment rates vary by case	Risk of number of cases and severity	Risk of average treatment cost	✓	✓	✓	✓
Discharge/admission-based	Each discharge and admission	Risk of number of discharges and admissions	Risk of number of services per admission	✓	✓	X	✓
Per diem	Each patient day	Risk of number of days	Risk of average cost per day	✓	✓	X	X
Global budget	All services provided within specified time-frame	None	All	X	n.a.	n.a.	✓

Source: Hsiao (1997).

Payment mechanisms not only directly influence provider behavior but they also interact with three of the five dimensions of organizational structure: distribution of residual claims, market exposure, and provisions for social functions.

- ❑ **Distribution of residual claims.** Most organizational reforms endow the hospitals with formal claims to residual revenue in different categories, but the structure of the payment system directly determines whether this claim has any real meaning or incentive effect. If, for example, services must be priced below cost, there will be no residual to claim. The relation of costs to the price-setting and capital-charging formula in the payment system thus becomes a critical determinant of incentives. The crucial factor is whether the provider's marginal cost-saving effort generates revenue flows that the provider can keep.
- ❑ **Market exposure.** Market exposure is perhaps the most obvious behavioral determinant of the reform model influenced by the payment systems. When reform means that a hospital must shift to earning its revenue by delivering services "on the market," the kind of market that emerges becomes crucial. Often the government is the largest or only buyer. In this case, the process and terms in which the government purchaser engages the provider may determine pressures on the provider to "deliver the goods." In other cases, there may be many purchasers—public and private, individuals, or large purchasing agencies. The purchasing strategies of all payers combine to create demand pressures on the providers, and consequently the type and strength of their motivation to perform. A key element of this pressure comes from the intensity of competition in the market.
- ❑ **Social functions.** As hospital managers start to cost out their activities, the payment system (sometimes combined with price setting or regulation) determine which services cover their costs. They will reduce internal cross-subsidization where possible. If hospitals have been playing a substantial safety net role by generating funds from some services to cover costs of services delivered to the needy, the payment system has to take this into account. The payment system will determine the extent to which unfunded mandates based on internal cross-subsidization become explicit and funded.

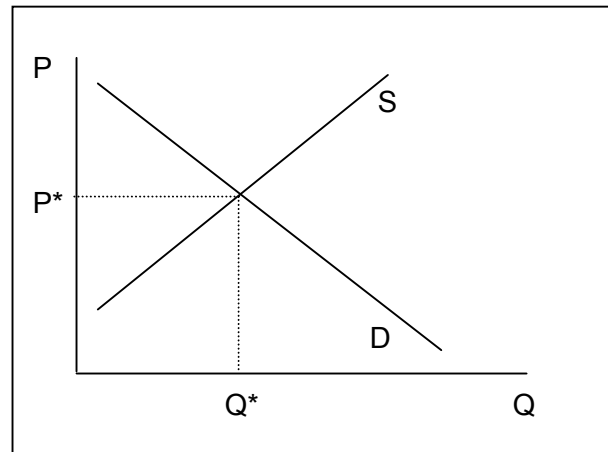
In sum, creating a strong purchasing function is an important reform complementing organizational reforms. Also, strong purchasing may reduce the need for regulation. Contracting can be more flexible and effective than regulation if purchasers have adequate capacity and transparency. If organizational reform includes a purchaser-provider split (as part of a move away from a publicly funded integrated delivery system), an effective purchasing function must be established as part of the reform. Alongside this, changes in the market environment may be required to release the potential for competition. Where the market is not potentially competitive (through small country or market size), compensatory regulatory or contractual mechanisms to protect consumers will have to be developed.

## Increasing market pressures

Parallel with changing the organizational form of their public hospitals, many reforming countries also aimed to encourage competition in the hospital market, linking rewards and sanctions to performance. In health systems run as a hierarchy and with provider payment based on a line-item budget, revenue and performance are often not linked: providers who outperform others and attract many patients do not necessarily receive more funding than those with a poor performance record. Furthermore, barriers to entry create natural monopolies which further prevent performance pressures from materializing. This lack of rewards and punishments stifles innovation and quality improvement and provides no incentives for efficiency.

*According to economic theory, competitive markets yield efficient allocation of resources based on the well-informed individual decisions of many sellers and many buyers without any coercion or intervention of a government body. In other words, in a competitive market, consumers demand goods and services until they reach the point where the marginal value of that good or service is equal to the price. Providers adjust their price until the marginal cost is equal to the price. Thus, reacting to price signals, consumers and producers adjust their choices until marginal cost is equal to marginal value and is equal to price. This means that competition equates demand with supply at an equilibrium price ( $P^*$ ) and volume ( $Q^*$ ).*

Figure 7. Interaction of demand and supply



Put in a simple language, markets allocate resources to the production of goods and services that people value. Due to competition for profit among producers, these goods and services get produced efficiently without any waste. If we compare such outcomes to public monopolies, the differences are striking: public monopolies often produce goods and services that people do not value and waste resources producing them. Marketizing organizational reforms in the hospital sector focus on improving the production efficiency of what is being produced.

Embedded in the above description of market mechanisms are a number of assumptions that have to be met for markets to be competitive and really lead to efficient outcome. These are:

- ❑ There are so many buyers and many sellers of a commodity or good that none can individually affect the price.
- ❑ Sellers and buyers are well informed about the quality of the product and about each others' prices.
- ❑ The commodity or service is standardized.

In many markets these conditions are not in place. For instance, the lack of standardized products makes it difficult for consumers to make effective price comparisons. Or barriers to entry—

natural or constructed—limit the number of sellers in the market, creating a situation where individual suppliers can influence the price. Or consumers may not have enough information about the product.

When the underlying assumptions are not met, imperfect competition results. In that case, there is no basis to predict that market mechanisms, without external interventions, will result in the efficient allocation of resources, low price, and high quality. Then government intervention is justified to either restore and ensure competitive conditions or replace market mechanisms with administrative mechanisms to allocate resources.

As there are few markets where all the conditions are met, the question of competition ultimately becomes one of degree: to what extent are the basic conditions unmet and how much does this limit the functioning of the market? In the following section we will explore the specifics of health services markets.

### **Market imperfections in health services markets (market failures)**

There are many, interconnected markets in health systems. The characteristics—that is, the extent to which the competitive conditions are met—are different in each of these markets. In a simplistic way, in a health system resources flow from people to a revenue collection agency that spreads the financial risk of illness among a group of individuals. These resources are then allocated to providers who provide health care services to patients. In this chain of functions, there is the market for health insurance, the market between payers and providers, and the market between providers and patients.

In this section, we focus on two markets: the market between purchasers and providers and the market between providers and patients. These markets are similar in that in both the subject of market transaction is health services and the seller of the service is hospitals. The difference between the two markets is in the identity of the buyer. In one market, the buyers are individual patients; in the other, the buyers are organized collective purchasers. Both markets are clearly interconnected.

Both markets are characterized by three main shortcomings: the product (health services) is heterogeneous; there may be natural and constructed barriers to entry and exit; and there is information asymmetry between buyers and sellers. However, not all three of these factors impede competition to the same extent in both markets.

**Table 9. Competitive market assumptions in the market for health services**

Assumption for functional markets	Purchaser-provider market	Patient-provider market
Information	Some asymmetry	High asymmetry
Many sellers (barriers to entry and exit)	Often monopoly sellers (high barriers)	Often monopoly sellers (high barriers)
Many buyers (barriers to entry and exit)	Often monopsony buyers (high barriers)	Many buyers (no barriers)

Within health care services, the extent of compliance with these assumptions also varies widely. This explains why privatization and competition have been more successful in some other parts of the health system but not necessarily for hospitals. For nursing home care and much of primary care, for example, the assumptions are much more favorable to use of markets. Even within hospital care, some services are easier for purchasers to marketize—for example, nonurgent surgery for standardized procedures such as cataract surgery. The market is larger (the patient can travel as the surgery is not urgent) and asymmetry is not an issue (technology is standard and the result is easily measurable).

**Barriers to entry.** Barriers to entry or exit means that entry to the health services market and exit are limited, affecting sellers, buyers, or both. In terms of sellers (service providers), the source of entry barriers include licensing and minimum standard requirements and the source of exit barriers include political unpopularity of closing down poorly performing hospitals. In terms of buyers, in the market for individual patients, many buyers always have free entry and exit, but collective purchasers often encounter barriers.

In the market between providers and individual patients, two kinds of market structure exist. In both scenarios purchasing is competitive, so no individual patient has market power to influence the price. Depending on the number and location of providers, these markets are characterized by either competitive provision or monopoly provision.

In terms of the market between providers and collective purchasers, the situation is more complex, and there are four distinct market structures. We can think about this as a 2-by-2 table indicating the number of buyers and sellers in the rows and columns respectively. Table 10 summarizes the resultant market structures.

**Table 10. Market structure modalities between purchasers and providers**

Provider \ Purchaser		
<b>Single</b>	Bilateral monopoly (e.g., rural Hungary)	Competitive purchasing with monopolistic provision (e.g., rural Chile)
<b>Multiple</b>	Monopsonistic purchasing with competitive provision (e.g., urban Hungary, Brazil)	Competitive purchasing and provision (e.g., urban Chile)

**Information asymmetry.** Buying health care services—by individuals as well as collective purchasers—is a transaction that involves serious information and measurability failures. This information asymmetry impedes efficient functioning of markets. In particular, information and measurability failures lead to high transaction costs and principal-agent problems.

However, collective purchasers seem better able than individual consumers to address information and measurability failures. They have better access to information and better

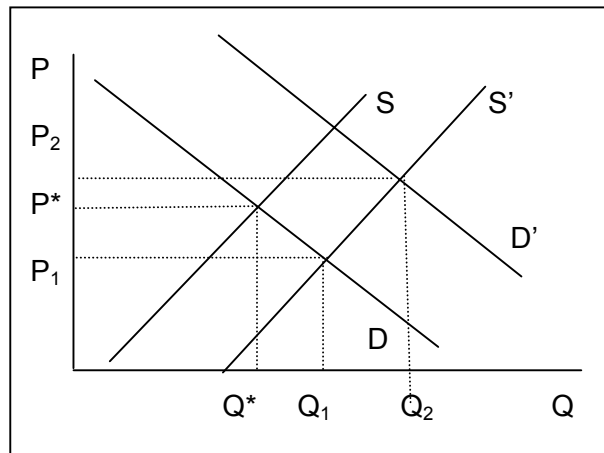
capacity process information. This is the main reason many countries are introducing competitive pressures on the market between purchasers and providers and deemphasizing the price-restraining and efficiency potential of competition in the market between individual consumers and providers.

**Heterogeneous product.** Finally, health services are not standardized, and comparison of the content of quality of service may be difficult for consumers. This is especially true of emergency procedures that limit shopping time and in developing countries where available information further limits consumers' ability to compare services with prices.

What is the implication of market imperfections? Whether competition in health care markets is socially wasteful or has resulted in efficient outcome has been much debated in the health economics literature. Empirical evidence is not comprehensive, and estimation methodologies are fraught with difficulties.

If the conditions for competitive markets are lacking, there is no reason to expect a welfare-maximizing outcome of competitive markets. Consider the following stylized example illustrated in figure 8. The supply of health services (from  $S$  to  $S'$ ) increases unexpectedly—for instance due to reduced entry barriers under new regulations. In a competitive market, this change should lead to intensified competition and lower prices (from  $P^*$  to  $P_1$ ). However, as the price begins to drop, providers' revenue begins to drop, and they have to provide more services to maintain their previous income. They can “induce demand” because they have more information than their patients, and demand might shift (from  $D$  to  $D'$ ) as a result. This would result in a higher volume ( $Q_2$ ) as well as a higher price ( $P_2$ ). Such observations have been made in several health care markets (e.g., Singapore, the United States), but there is also evidence to the contrary, that competition results in lower prices.

**Figure 8. Interaction of demand and supply**



### **Creating a functioning market environment for health services**

Despite the lack of evidence, markets are powerful instruments for increasing efficiency, but the specific conditions in the market in question have to be factored into the reform design. Imperfections in the market between providers and individual patients seem to be more severe than those in the market between providers and collective purchasers. This would explain why many countries have been deemphasizing the introduction of market mechanisms in the provider-individual patient market: reliance on the combination of price competition and patient choice has led to a medical arms race in a number of instances and by itself does not appear to be a viable mechanism to keep prices down. At the same time, the same countries have been reinforcing competitive pressures in the provider-collective purchaser market, and in this section we review the mechanisms by which this has been attempted.

There are two models to create competitive pressures in the market between purchasers and providers. We will informally refer to these as the UK model (box 7) and the Australia model (box 8). The two models are distinguished by whether or not they expect competition on price and thereby allow price be set between purchasers and providers. In the UK model, there is competition on price, which is expected to be set between the purchaser and the provider, though subject to strict pricing regulations. Australia, on the other hand, uses diagnosis related groups (DRG) to reimburse hospital care, identical in every hospital, and thus competition on price is not expected. Australia uses contestability, yardstick competition, and tendering of selected services to introduce competitive pressures into its health system.

**Reducing barriers to entry and exit.** The most direct way of increasing competitive pressures is to reduce barriers to entry and exit. In principle, reducing barriers to entry and exit intensifies competition for market share. While regulations for minimum standards and licensing have been maintained to protect consumers, several countries have experimented with "selective contracting," "sector neutral competition" and "competitive tendering of selected services" as ways of reducing barriers to entry.

- ❑ *Selective contracting means that purchasing agencies are allowed to place contracts where they could achieve the best value for their communities and remove contracts upon dissatisfactory performance.*
- ❑ *Sector neutrality refers to contracting equally with private and public providers, depending on who offers better conditions.*
- ❑ *Competitive tendering of selective interventions refers to singling out services that are well identifiable, easy to measure and monitor, and not particularly asset-specific in their production,<sup>1</sup> and choosing provider(s) through an open competitive bidding process to provide the service in a long-term contract.*

In principle, the intention behind selective contracting is that poor performers will not be able to earn enough revenues through competition providing the government with a rationale to allow them to exit from the system. As private providers are thought to be more efficient, the concept of sector neutrality was expected to further increase competition and benchmark provider performance to private sector efficiency and quality standards.

### Box 7. The UK model of competition

**The instruments:** The thrust of the 1989 reforms was to design and implement an internal market characterized by retained public financing and provision but increasing reliance on competitive pressures. Internal competition was created by separating the purchasing and provision function within the National Health Service (NHS). The general practitioner fund-holding scheme allowed general practitioners who had more than 7,000 patients to hold and manage budgets to purchase secondary and tertiary care services for their patient population. Private insurance companies were also allowed to contract with public providers. Purchasers could freely contract with Trusts, private hospitals or community service programs. This has resulted in a more flexible market structure with more options both for purchasers and providers to move contracts where they find better value for money.

Two key instruments were intended to foster competition among providers: (i) reducing the barriers to entry by allowing purchasers to engage in selective purchasing and sector neutrality between public and private sector providers and (ii) allowing competition on price by letting price be set by the market.

**The impact:** Comparing average cost per episode in Trusts and directly managed units during the first three years after the reforms, Soderlund (1997) and colleagues found that gaining independent Trust status was associated with significant productivity gains. The authors could not exclude the possibility of self-selection as hospitals that became Trusts were initially less productive than those that did not. By the end of the study period, greater efficiency gain in Trusts than in directly managed units eliminated the base-line productivity differential. The authors hypothesize that significant efficiency gains were achieved immediately after transferring to Trust status, as for second and third wave Trusts the greatest gains appeared in the year of gaining Trust status.

The UK reforms illustrate that competition may not unfold as vigorously in publicly planned markets as in free markets with predominantly private actors. Even when there is competition, the impact on efficiency and quality may be less than would be expected in the private sector for several reasons. First, in areas characterized by excess capacity, competition may be limited by the unwillingness of the political system to exit loss-making or poorly performing entities. Second, in areas with monopoly providers, there may be no room for competition due to natural barriers to entry. Third, since the purchaser-provider split yields greater transaction as well as administrative costs, it is only worth it if the resulting competitive pressures yield commensurate gains in efficiency and quality. Finally, the UK Trusts seemingly had the autonomy to set prices. In reality, however, prices were tightly regulated by requirements to use average cost as the basis, and earn a fixed return on assets. In contrast to more complete freedom and marginal cost-based pricing, these highly regulated pricing requirements weaken the competitive drive of the system by limiting the potential gain from entrepreneurial behavior (sales of loss-leaders, undercutting rivals).

In practice, however, governments in most countries have not stayed at arms length as markets started to work, and poor performers were identified and exposed. In a purely private market, poor performers would exit the market once they were no longer profitable. For health services, governments often bail out loss-making public hospitals.

**Contestability.** *Contestability implies competition not for market share at any given time period but competition over time. Some would include under this heading long-term contracts “for the market” periodically retendered.* For example, the management of a monopoly hospital may be openly advertised. The winner will not have any competitive pressures for market share for the duration of the contract because the hospital is in a monopoly situation, and there are no effective actors to enter the market. But the management company is still under competitive pressure as the contract, and its funding, expires after a term and will be rebid. The performance of the management company during its contract term will influence the company’s chances of winning the next bid.

In the Kenyatta National Hospital, management was contracted out to an international private consulting company. This was expected to improve management skills, but in practice, it was hard to get the hospital physicians to accept the company's management practices.

***Yardstick competition. Yardstick competition refers to the use of comparative provider performance indicators to put pressure on providers to improve performance, or as a basis for determining service prices. This mechanism is often used, relying on the monopsonistic purchasing power of single payer purchasers, which allows them to make funding conditional on performance.***

The extent to which these competitive pressures were introduced in the reviewed countries varies widely. For instance, competitive pressures introduced in the United Kingdom were much greater than those introduced in Hong Kong although both corporatized their hospitals. There is also a great discrepancy in terms of design and implementation. In New Zealand, for example, reform design to introduce competitive pressures was very ambitious. As markets started to work, however, politicians did not stand by at arms lengths. The market was also so small that many providers held local monopoly power. In response, the purchaser now relies heavily on benchmark competition to determine the prices for hospital contracts. By contrast with these problems in the market for hospital services, however, the purchaser successfully used competitive tendering and contracts in which “money follows patients” for long-term care and social care.

### Box 8. The Australian model of competition

The Australian model is different from the UK model in that competition on price is not allowed since all hospitals reimbursed under prospective case-based payment systems (diagnosis related groups, DRG). In the absence of significant direct competition for market share, Australia (the state of Victoria) has relied on other mechanisms to encourage performance improvement.

**Yardstick competition.** This involved monthly comparisons of the performance of networks using a standard set of financial and performance indicators. Most of the comparative data go monthly to Department of Health and similar indicators are used within networks to monitor performance. In addition, networks were required to publish a standard set of performance data in their annual reports, and the department published comparative data. There has been very little scrutiny of annual report data by the media, academics or community groups, either on a comparative basis or over time, although the department's publication of elective surgery and emergency department waiting time is widely reported.

**Competitive tendering of new services.** The second source of increased competitive pressure has been through the use of tendering for the allocation of some new and restructured statewide and cross-network clinical services. For example, contracts to deliver a statewide infectious disease service and HIV/AIDS service were awarded to the Western Health Care Network and the Eastern Health Care Network (the Alfred Hospital), respectively, in March 1996. St. Vincent's, an acute care public hospital run by the Catholic Church, won the contract to provide lithotripsy services to one region. Also, they tender for new additional amounts of existing services.

A number of factors have lessened the use of competitive tendering for the allocation of cross-network and statewide services. Only a few providers could offer the necessary related services (particularly in the case of major trauma). Also, some services have to be conveniently located for the main client group (i.e., for HIV/AIDS services, in Melbourne's gay neighborhood).

**Competitive tendering within networks.** The third source of competitive pressure has been the increased use of open tendering within the networks. This was driven partly by the Kennett Government's implementation of competitive neutrality under Australia's National Competition Policy and partly by the increasing pressures on costs. Competition policy attempts to facilitate "fair" competition between private and public providers of final goods and intermediate inputs.

The Kennett Government identified a number of business activities undertaken by hospitals that could be subject to competition from private providers and which consequently needed to be subject to internal review and appropriate internal costing. These services included nonclinical services such as car parks, computing, laundry services, engineering, cleaning and catering, and certain clinical services including medical imaging, pathology, pharmacy, allied health services and general practitioner services. Networks could choose to bid out other services. Some services have been extensively tendered—37 percent of cleaning and catering in the larger hospitals are now contracted out.

Network managers, one step farther removed from direct service delivery, may have been more enthusiastic than hospital managers about competitive tendering. Almost all the network board members surveyed considered that, since the establishment of networks, board interest had increased in competitive tendering of both clinical and nonclinical services, although this may just reflect the increasing cost pressures over the period. Most considered greater interest in competitive tendering of services a positive development.

**Contracting out management and ownership.** The fourth source of competitive pressure has been the tendering of the operation of public hospitals. The Kennett Government seemed to be moving toward a mixed system with both corporatized networks and competitively tendered and privately built and operated public hospitals coexisting in the metropolitan area. After first tendering for the financing, construction and operation of two rural hospitals, the Kennett Government commenced a process of competitively tendering two much more complicated tertiary teaching hospitals in the metropolitan area and one less complex outer suburban hospital.

*Source: Corden, in Preker and Harding eds, 2003*

## Encouraging good governance

The last complementary reform of enhancing the role of owners is less well understood than the previous reform measures. Primarily this is because governance (the function of ownership) has been overshadowed by other health system functions: owners of hospitals may not be separate organizations from those exercising government oversight and doing the purchasing. For instance, in integrated health systems these three functions are often exercised by the Ministry of Health. However, as health systems unbundle core health system functions, the role of governance becomes more explicit. Below we attempt to review some governance lessons from other sectors and provide an introduction to the experience of its function in the health sector.

***Governance is commonly defined as the relationship between the owner and management of an organization.*** “Good governance” is said to exist when managers closely pursue the owners’ objectives or when the “principal-agent” problems have been minimized. Governance is usually not a problem in small businesses or organizations where owners can directly observe and evaluate managerial performance. From observing successful large private organizations, experts have identified these key ingredients for good governance:

- ❑ *Objectives.* Narrow, clear, nonconflicting objectives of owners are translated into narrow, clear and measurable criteria for management performance. Managers in a private corporation can be monitored relatively easily because owners have two objectives: to maximize profits and to maximize share price, both readily observable and measurable.
- ❑ *Supervisory structure.* Responsibility for supervising management is vested in an effective, professional body (Board of Directors) which has clear responsibilities and accountabilities.
- ❑ *Monitoring and motivation of management.* Competition in the product, labor, supply and capital markets promotes managerial efficiency by forcing the adoption of the most efficient production arrangements in order to stay competitive and capture market share. Competition in the product market allows owners to compare performance of the firm (and management) with other firms and diminishes monopoly rents, which might be misallocated by management, obscuring weak performance. Ability to monitor performance, combined with a competitive managerial labor market, allows owners to compare performance of company managers and to motivate them with rewards and job security. Accounting standards and well-functioning market institutions such as stock markets drastically reduce the costs of monitoring management. Profits from one company can be easily compared with similar companies in the sector. Share prices can be easily observed.

### **Why do public hospitals (budgetary organizations) have bad governance?**

- ❑ *Ill-defined objectives.* Hospital goals are not well-defined and may conflict. Hospital goals are not differentiated from sectoral goals (may include delivery of quality health services, efficient use of government resources, poverty alleviation (equity), and delivery of “social” goods).
- ❑ *Faulty supervisory structure.* Accountability mechanisms are weak and focused on input control. Objectives are not usually translated into narrow, clear performance criteria for management. Often no effective structure is in place for monitoring managerial performance. Politicians and bureaucrats involved with supervision have latitude to pursue their own

(nonhealth related) agendas—including employment generation, sinecures for loyal supporters, and the like.

- ❑ *Lack of competition.* Even when managerial performance criteria may formally exist, monitoring is hampered by the lack of competition or external institutions (like equity or debt markets) that generate information about relative performance.

**How do the reform modalities of autonomization, corporatization, and privatization address the governance problems of public hospitals?**

- ❑ *Objectives.* These reforms are designed to address governance problems by narrowing the range of objectives for which managers are accountable. The objectives are translated into measurable performance criteria.
- ❑ *Supervisory structure.* Organizational reforms often include the creation of a professional organization (agency or board) vested with responsibility for monitoring achievement of performance targets. Frequently individuals are recruited for their technical or professional qualifications rather than their ability to manage. Usually the objectives are narrowed to focus on *economic efficiency*—which is more easily monitored than other objectives. However, this requires the development of alternative mechanisms to pursue other sector (social) objectives.
- ❑ *Competitive environment.* Organizational reforms sometimes include provisions for product market competition or benchmarking to help the government-owner judge managerial performance. Capital funds may be allocated on a competitive basis to encourage accountability in financing improvements and repayment of debt. Management employment and salary may be tied to performance.

**What are the biggest problems in trying to improve governance through organizational reforms?**

- ❑ *Continued politicization of decisionmaking and opaqueness of intervention.* Old habits of informal intervention by “owners” in operation of the hospital usually continue if the organizational reform fails to establish an oversight structure that ensures accountability for the narrowed range of goals or to develop or ensure the use of other mechanisms to achieve key sector goals (e.g., related to access and equity).
- ❑ *Failure to hive off or ring-fence “social” goods.* Governments often have difficulty clarifying which services they want delivered and targeting subsidies effectively. Often, these objectives end up relying on cross-subsidization inside the hospital. Management may then blame its poor economic performance on ad hoc interventions, unfunded mandates, and the associated costs. This reduces the ability of the owner to hold the manager accountable for the economic or other performance targets.

**Why these failures?**

- ❑ *Internal stakeholders disagree.* Defining narrow objectives is hard in health because multiple interests in government who may well disagree on what the key objectives are or ought to be. Government-owners may have many objectives in the sector and not know which ones should receive priority.

- ❑ *Clear objectives and priorities reveal trade-offs.* Specifying objectives and priorities can make explicit what is not a priority and what the state will not deliver or fund. This exercise is often politically costly.
- ❑ *Challenging new tasks for bureaucrats.* Creating alternative mechanisms to pursue other sector objectives (besides organizational efficiency) is hard because it requires governments to engage in more complex activities (like contracting, purchasing and regulation). Under an integrated public system (budgetary organizations), governments can functionally pursue sector objectives through implicit understandings that they would transfer resources of x-amount and the hospitals would provide services in some form to whoever walks through the door. Under an organizationally reformed system, the government would have to identify what services would be delivered to the poor (for example) and purchase (or sometimes mandate) their delivery.
- ❑ *Bureaucrats prefer direct control and discretion.* Even when alternative accountability mechanisms exist, politicians and bureaucrats usually prefer ad hoc direct interventions with fewer constraints on their relations to the hospitals. Lack of constraints on these interventions create many problems.

Governments that try to improve governance through emulation of the corporate model will need to enhance their capacity to develop and implement sector policy through indirect mechanisms such as contracting and regulation. They must create structures for administering the new accountability arrangements—and for restraining ad hoc intervention by politicians and bureaucrats.

## 5. MANAGERIAL INSTRUMENTS

The final contributor to successful reforms is the quality of hospital management. Organizational reforms require a strong managerial role and clearly delineated responsibilities. Autonomous and corporatized hospitals need strong and skillful managers and management systems that are much more sophisticated than those in budget units operating under detailed central regulation.

As with other public sector organizational reforms, hospital autonomization or corporatization requires a new management culture: willingness to take responsibility and exercise initiative, ability to lead and motivate change. The type of skills and personal qualities valued in bureaucrats in traditional budget agencies are quite different from those required in corporatized organizations.

What distinguishes hospital reform, however, is that secondary or tertiary health care services are markedly more complex to manage than many other public sector enterprises. New managers face a major challenge in achieving credibility with skilled medical staff, many of whom operated with extensive professional autonomy within traditional public health systems. Alongside organizational reform, autonomous hospitals are likely to need to adapt to new contractual and payment arrangements.

Management information systems become crucial in reformed hospitals. It is impossible to implement a purchaser-provider split and institute contracting without a minimally effective management information system. Financial management systems also have to change to build in private sector accounting standards and systems for managing new responsibilities for debtors, creditors, procurement, capital investment, asset management, human resource management and so on. However, the impact of upgrading management information systems is likely to be much greater than in traditional budget agencies, because organizations face stronger incentives to monitor costs and structure services efficiently and are likely to be more motivated to use information systems.

A hospital director in the new environment will need skill and experience in managing finance, marketing, human resources, procurement, general business management strategy, and medical management strategy, each briefly reviewed below.

---

### **Finance**

As explained earlier, governments are often compelled to undertake hospital reform to address inefficiency, insolvency, and financial mismanagement. In most cases, financial health of the hospital is therefore a foremost concern of hospital managers. Hospital managers need not be financial experts. Rather a good manager must be able to communicate with financial specialists by asking pertinent questions that lead to sound financial policy. The fundamental questions to be posed encompass topics such as financial statements, capital assets, profit, debt, pricing and payment, and long-term financial planning. Formulating and asking the right questions will enable managers to select and subsequently monitor financial policy.

---

## **Marketing**

---

Corporate managers have relied too much on traditional financial measures when evaluating behavior of business entities. These measures reveal past accomplishments but do not foretell future directions of the organization. Therefore, a balanced evaluation framework must include measures of dimensions that can serve as leading indicators. One of these dimensions, conventionally known as marketing, measures business operations from a customer's perspective with a view toward assessing long-term potential for profitability and growth. Various components of customer attitudes and behavior are connected like a chain linked to business performance. Profit and growth are linked to customer loyalty, stemming from customer satisfaction. Customer satisfaction is determined by quality and price. For hospitals, customer attitudes will be affected by what they hear from their doctors, relatives, friends, and neighbors. Hospital reform should ideally improve all of these indicators.

---

## **Human resources**

---

This chain of customer attitude and behavior can feed into another chain in the human resources dimension: the service value is linked to employee productivity, which is linked to employee loyalty, then to employee satisfaction, and finally to the internal quality of work life. This dimension grows in importance as a business becomes more service oriented since the nature of hospital services demands direct interaction between care providers and patients. Satisfied employees not only produce better services than disgruntled employees, but are also more pleasant to patients and therefore provide utility directly to the customers.

Although producing satisfied employees is not the objective of hospital organizational reform, failure to satisfy doctors, nurses, and other hospital workers can create political obstacles to the reform. Thus, assuring that the employees who stay with the hospital during the reform are the ones who can contribute to and gain the most from the reform will help protect the reform process from political backlash.

On the other hand, employees who are forced out of the hospital or otherwise disadvantaged by the reform may oppose the reform for personal reasons. In some cases, reform deprives an individual of opportunities to profit illegally from the sale of drugs or other public property. In other cases, reform might simply force workers to exert more effort or be present a larger proportion of the work day. One reason for thorough timely evaluation of organizational reform using methods described here is to protect a well-performing reform from misguided or misleading criticism. To the extent that the evaluation reveals problems in the reform process that support the claims of reform opponents, reform and public health are both best served by revealing these problems and discussing their solutions in public.

---

## **Procurement**

---

Procurement refers to purchasing procedures for hospital equipment, medical and nonmedical supplies. These inputs constitute a large part of factor inputs required for the hospital production process, especially in developing countries where labor is relatively cheap. A cost analysis of hospitals in a group of developing countries by Barnum and Kutzin (1993) suggests that drugs and other nonlabor costs account for anywhere from 21 percent of the total recurrent cost in Nigeria to 78 percent in China. A recurrent capital ratio for another group of developing

countries, averaging 0.20, highlights the relative size of nonlabor part of hospital costs. When the hospital management does not face a hard budget, lack of accountability often leads to irrational investment and purchasing decisions. Effective management would address this issue and ensure a sound decisionmaking process by incorporating the procurement dimension into its evaluation norm.

---

### **Business management strategy**

---

Hospital management affects every stage in the hospital production process, which, in turn, influences hospital performance. The key to successful organizational reform is to link an organization's long-term strategy with its short-term actions. The first step of such strategic management is for the senior managers and the hospital board to define the organization's mission or, in their terms, its "vision." For practical relevance, the vision must be closely tied to specific objectives and measures endorsed by senior managers. The long-term plan should be defined with input from the marketing department regarding consumer attitudes. It should state the hospital's objectives over the next few years, including its product mix, its projected patient mix, the communities it intends to serve, and the quality of that service.

The second step is communicating and linking, which refers to dissemination of the mission set by senior managers to all the levels of the organization in order to ensure that departmental and individual goals are not limited to short-term financial goals. The next process is business planning, which consists of setting the priorities, based on the organization's performance goals, among potentially conflicting reform programs in order to allocate scarce resources in the most efficient way. These three processes set the context within which management can define and subsequently monitor managerial and administrative procedures for marshalling human, physical and financial resources. The final step is feedback and learning, which enables strategic learning based on the review of departmental and individual performance.

---

### **Clinical management strategy**

---

In contrast with business management strategy, medical management strategy concerns hospital behavior at the level of direct patient care. Its main purpose is to improve clinical standards and practice patterns to achieve better health outcomes, with cost control typically a secondary, but important, concern. Indicators of the quality of medical management can include the presence or absence of quality-control reviews of the work of individual physicians by a committee of their peers and development and application of a set of recommended "clinical pathways" for specific, frequently encountered sets of presenting conditions. Clinical pathways, together with the "integrated package," are a widely accepted disease management approach. Disease management aims to improve effectiveness of care and cost effectiveness and involves shifting away from more expensive inpatient and acute care to areas such as preventive and ongoing care, health promotion and education, and outpatient care. Once clinical pathways have been adopted, the quality of medical management can be judged by the extent to which physicians apply those pathways in their practices.

### Box 9. Management reforms in Hong Kong's hospitals

In Hong Kong, public hospitals were corporatized in 1991 under the holding of a single statutory nonprofit public corporation, the Hospital Authority (HA), independent of the government bureaucracy and established with the mandate to manage all public hospitals. The HA Head Office has focused on transforming the management practices and corporate culture of public hospitals. The annual planning process, the budget allocation mechanism, and other modern management tools serve as the main instruments to influence hospital behavior. Relative to the previous government bureaucracy, these mechanisms have proven to be more effective in improving the performance of public hospitals. In particular, the annual planning process makes production much more objective and result oriented and tries to link input and output more explicitly.

One of the foremost tasks of the Hospital Authority was the formulation of the *corporate plan*, setting out long-term strategies and providing guidance for planning services. The *corporate vision* as developed by HA Head Office senior management, and endorsed by the HA Board and the HWB, is as follows: "The Hospital Authority will collaborate with other health care providers and carers in the community to create a seamless health care environment which will maximize health care benefits and meet community expectations.<sup>1</sup>"

Corporate directions and strategies as stated in the corporate plan are operationalized through the *annual planning process*, which the backbone of HA management, planning, and control. The HA *service product list*, spelling out the volume and mix of new program initiatives to be provided by HA hospitals for the coming year, is formulated with input from the government, the board, the Hospital Governing Committees, the Specialist Service Coordinating Committees, and the community. Input from hospitals is also sought through communication with hospital senior management and frontline staff with a view to aligning values and priorities in the definition of service products. HA Head Office works with health care executives to draw up the plans for individual hospitals. During this process, adjustments might be necessary to reflect budget constraints, overall service requirements, and local aspirations of hospitals.

Hospital-level planning is initiated by the hospital chief executive and the senior management team. Senior management identifies parameters combining prior agreement with the HA Head Office and the hospitals' own initiatives. Planning must adhere to the broad product lists and programs previously agreed and defined between the hospitals and HA Head Office.

Prior to the establishment of Hospital Authority, hospitals focused almost exclusively on their own activities and services, without viewing themselves in the context of the entire public system or the greater community. People were less inclined to work within the confines of the annual budget through increased efficiency or to strive for broader societal goals.

Each hospital's baseline budget is based on the previous year's budget, modified by annual pay award and inflation, expected changes in service utilization, and new service provision as agreed in the annual planning process. One feature that attempts to alter the hospitals' incentives is the mandate for each hospital to increase its productivity every year. In past years, this productivity gain ranged from 1 percent to 3 percent of the baseline budget of individual hospitals. Productivity gains are expected to be achieved mainly through service enhancement or expansion, without changing total inputs. In the past, half of the productivity gain was allocated to corporate initiatives of the Hong Kong Health Authority, products and programs, and the other half was retained by individual hospitals to fund their own initiatives.

## 6. LESSONS LEARNED: CHALLENGES OF REFORM DESIGN AND IMPLEMENTATION

So far we have seen the complexity of organizational reforms—reformers have to obtain coherence within the hospital’s organizational structure as well as ensure the consistency of the organizational form chosen with the external environment. Putting all this together, this section summarizes key lessons of successful reform design and implementation learned from country experiences throughout the world.

---

### **Challenges of consistent design**

---

During the design phase, reformers must confront three questions. First, do they have the necessary institutional endowment to pull-off the design and implementation of such complex reforms that rely on market forces? If the answer is yes, and the design work goes ahead, reformers then have to ask where on the spectrum between the core public sector bureaucracy and the market do they want their hospitals to operate? Finally, they have to ask whether they can change aspects of their hospital sector that seem to be essential ingredients of successful organizational reforms. We address these three questions in detail below.

#### **How to factor-in preexisting institutional strengths and weaknesses?**

A country’s prevailing institutional characteristics can contribute to (or undermine) the success of organizational reforms. Successful implementation of organizational reforms is associated with the preexistence of functioning markets, a well-functioning public bureaucracy, and some managerial experience at the hospital level.

If private sector and market institutions are weak (e.g., contracts are unenforceable, rule of law is unobserved, anticompetitive practices prevail), it may be overoptimistic to expect markets to have positive impact in the public sector. In fact, in such cases, “marketizing” reforms may worsen the situation in the health sector if dysfunctional markets are put in place.

A well-functioning public bureaucracy may enhance the probability of successful implementation of organizational reforms. The more successful reform cases are associated with a tradition of disciplined top-down public administration in which managers expect to comply with new national policies. There was strong central government policy leadership in all these countries and continuity of leadership through the design and implementation phases of reform. Leadership came either from the political level (e.g., presidential support in Tunisia) or the apex of a strong state health bureaucracy (e.g., alignment of the directors of the Medical and Health Department and the Health and Welfare Branch in Hong Kong).

These reforms strengthen the role and responsibilities of managers. Autonomous and corporatized hospitals need stronger management skills and more sophisticated management systems than those in budget units that operate under detailed central regulation. As with other public sector organizational reform, hospital autonomization or corporatization requires a new management culture: willingness to take responsibility and exercise initiative, ability to lead and motivate change. The type of skills and personal qualities valued in bureaucrats in traditional budget agencies are quite different from those required in corporatized organizations. What distinguishes hospital reform, however, is that secondary or tertiary health care services are markedly more complex to manage than many other public sector enterprises. New managers

face a major challenge in achieving credibility with skilled medical staff, many of whom operated with wide professional autonomy within traditional public health systems. Alongside organizational reform, autonomous hospitals are likely to have to adapt to new contractual and payment arrangements.

In countries with weak institutional endowment—markets, public administration, and management culture—marketizing reforms may worsen the situation in the health sector by increasing the risk of loss of control and abuse of public resources. Although some institutional weaknesses can be addressed, such changes take a long time. Thus, the capacity of most institutions should be taken as given and hospital reforms designed with these limitations in mind.

### **Where between core bureaucracy and markets or how to get the dial-settings right?**

The more successful of the cases reviewed fall into two types of reform design:

- ❑ The first group is comprised of those countries who designed and implemented *coherent market-oriented change* (e.g., Singapore and Malaysia) where hospitals were corporatized and where organizational change was accompanied or preceded by changes in payment arrangements to reward productivity and encourage output;
- ❑ The second group is comprised of countries that designed and implemented *incremental management change* (e.g., Hong Kong and Tunisia) where improved internal management of hospitals was the focus of reforms rather than changes in the market environment.

Under either of these two types of design, tensions and inconsistencies in dial settings for health care providers appear to be less an issue than in cases such as the United Kingdom or New Zealand, which occupied an awkward middle ground, as a result of ambivalence and conflicting signals about embracing market-oriented changes. For example, the New Zealand case is at the “autonomous” end of the spectrum except for “residual claimant status.” Hospital managers were given freedoms without adequate incentives for efficiency. Conversely, the Indonesian case is at the “budget agency” end of the spectrum except for “residual claimant status.” Managers were given incentives to increase private earnings, without freedom to optimize their input mix and without protection of efficiency and equity objectives through either accountability or market mechanisms.

### **Is it realistic to expect change in “essential design ingredients”?**

From reviewing successful and unsuccessful reform cases, some reform ingredients seem to be critical. Without them, embarking on this type of organizational reform makes little sense. They include (i) coming to grips with labor issues, (ii) enforcing hard budgets, and (iii) changing the provider payment mechanism to reward good performance.

- ❑ **Labor issues.** Labor costs often amount to more than 60 percent of hospital costs and are thus the most significant (costly) input of hospital operations. If organizational reforms do not expand hospital autonomy over labor, hospitals are tightly constrained in their ability to adjust their costs in response to incentives to improve efficiency.
- ❑ **Hard budgets.** If hard budgets are not enforced and hospitals are bailed out, poor financial performers are rewarded, and hospitals with good financial performance are effectively penalized. This creates a moral hazard situation where incentives to save and achieve efficiency gains are weak.

- ❑ **Provider payment reforms.** If hospitals receive historical budgets, there is not much sense in changing organizational structure as historical budgets give no incentives to improve performance in terms of efficiency and responsiveness. Hospitals would have instruments to change their behavior but they would have no reason to do so.

The not-so-successful reforms of Indonesia and New Zealand illustrate these cases. In the absence of changes in provider payment arrangements and other public sector controls, Indonesia did not provide adequate incentives or opportunities for autonomous hospitals to improve performance in serving subsidized patients. General civil service law and regulations protected public hospital employees from redundancy or redeployment, and constrained hiring and pay. Because hospital organizational reforms did not change these constraints, some of the potential benefits of autonomy could not be realized. Indonesia also left its autonomous hospitals with partially funded mandates to provide access for the poor. Attempts to protect access by regulation were undermined by weak enforcement.

New Zealand failed to increase market exposure of corporatized hospitals, due to political and practical constraints (small market) on provider competition and weak purchaser performance. While the intention was to make corporatized health service providers the residual claimant on profits (apart from dividends payable to the government as shareholder), almost all providers ran operating deficits, financed by the government in a nontransparent way and leaving the government as the de facto residual claimant.

## **Challenges of successful implementation**

Consistent reform design is only half the battle and no guarantee of successful implementation although it is a necessary condition for it. In this section we review four key challenges of implementation encountered by countries in the course of organizational reform.

### **Challenges of decentralized ownership**

Federal systems illustrate the importance of the relationship between policymakers and the people responsible for implementation. The division of authority between federal and state governments affects the ability to implement policies determined at the federal level, and this also applies in unitary systems where national, regional, and local governments play a part in the administration of health services. The exercise of discretion by lower level agencies may hinder the implementation of national policies, although at the same time it may be a source of innovation and experimentation. This also applies in federal systems where innovation at the state level may be picked up and generalized by federal agencies. A key question in federal states is whether a policy may originate at the bottom of political systems rather than the top. Whatever the reason, decentralization is likely to make the implementation of national policies harder to achieve, although the existence of a strong value system may help promote consistency in approach between decentralized agencies.

### **Phasing: big-bang or incremental change?**

The pace of change is part of the approach to reform. In some circumstances, politicians may move rapidly to introduce new policies whereas in others changes may be phased in over a period

of time. The judgment here has to do partly with the length of time available to elected governments to implement their policies and partly to the most effective way of countering potential opposition. The approach taken to reform may be incremental or “big bang.” Incrementalism is usually associated with coalition governments and big bang with majority governments, although the tendency for change to occur at the margins is well established in all political systems. There is some evidence from the United Kingdom and elsewhere (Bennett, Russell and Mills, 1999) that reforms introduced quickly run into difficulty and may have to be amended during the implementation process. Equally, reforms introduced slowly may fail to deliver what is expected or may be assimilated by existing institutions to frustrate the reformers’ intentions.

Of the reviewed countries with organizational reform, some countries opted for the big-bang approach and applied the design to all hospitals in the country. This was the case in New Zealand. Others countries preferred to experiment with pilots, evaluate them, and then decide whether to expand the new organizational design throughout the country. In such cases the key question is which hospital(s) should be selected as pilots. Most countries that have gone down this route selected their tertiary flagship hospitals for the pilot experiment. This is understandable, since organizational reforms require complex institutional and attitudinal adjustments. While in these hospitals, the probability of success is higher, evaluation results might not be valid in other hospitals. Finally, the third group of countries allowed transition time and within this allowed transfer to the new organizational form voluntarily. This was the case in the United Kingdom.

### **Will politicians let the market work?**

Depoliticization of decisionmaking in hospitals is a crucial factor in the success of organizational reforms. Political stability and consensus among political forces is critical because the benefits are likely to come only in the medium to longer term. In many reforms performance deteriorated, and costs went up initially. If policymakers cannot “stay the course,” the benefits may never be reaped

### **Essential ingredients of a political strategy**

Approaching the political strategy aspect of organizational reforms is no different from any other kind of health sector reform: potential winners and losers create two opposing camps of supporters and opponents, and compromises may be required to achieve a critical mass of support. A few key lessons show up from the review of country cases:

- ❑ Patience is important, as organizational reforms take time—costs come quickly but benefits show up in the medium to long term.
- ❑ A solid communications strategy is essential to inform the public and to manage expectations. These reforms should not be oversold, and the population should not be encouraged to think that benefits will come quickly.
- ❑ Buy in from doctors is a necessary precondition for successful implementation.

## 7. CONCLUSIONS

What lessons can we take away from this review of organizational reforms?

First, it is important to remember that organizational reforms are instruments to achieve certain objectives but not others. Specifically, if the objective is to improve efficiency and responsiveness to patients, organizational reforms have the potential to be successful. However, if priorities are to improve access to health care and financial protection against illness, organizational reforms can do little to meet such objectives.

Second, organizational reforms are complex because they are systemic reforms: successful reforms require consistent redesign of hospital organizational structures and also matching changes in the external environment. Governments should not expect organizational reform *on its own* to deliver some of the objectives for which it is sometimes prescribed—reducing fiscal costs; shifting resources to primary health care; or rationalizing excess hospital capacity. In a publicly owned hospital system, powerful purchasing levers—planning tools and provider payment decisions—must be used in conjunction with organizational reforms to achieve these objectives. Well-executed organizational reform nonetheless appears to have the potential to facilitate improvements in technical efficiency and quality, if carried out as part of a set of complementary reforms to provider payment and market exposure.

Third, the kind of organizational reforms reviewed here are “marketizing” reforms. Marketizing reforms work on the assumption that the market instills greater discipline on provider behavior than central planning. This means that policymakers have to let the market deliver on performance rewards as well as on penalties. This might not be desirable or acceptable from a political point of view. Acceptable rewards and penalties must be acknowledged in advance. Otherwise, politicians will intervene when market mechanisms begin to function as intended.

It might seem natural to conclude that for many developing countries with limited institutional capacity and limited resources to meet transition costs of change, autonomization or corporatization reforms would come at a great risk of failure, unless they go hand in hand with capacity building and with systemic reforms to provider payment arrangements and regulation. Indeed, in countries where public institutions are weak and corrupt, more rigorous supervisory mechanisms may be required. In such countries, special mechanisms may have to be developed to prevent nepotistic appointments to boards and senior management.

However, a number of studies of developing-country experience with managerial autonomy within the public sector do find that it is associated with more efficient and better quality service. It may be that, in many developing and transition countries, against a background of major misallocation of resources in public hospitals, improvements can be achieved with relatively simple and modest reforms in the incentive environment of hospital management. By contrast, recent reforms in stable, well-resourced, relatively well-managed public hospital systems may be reaching a level of diminishing returns to effort in promoting efficiency.

Moreover, some developing countries may be granting hospitals autonomy for reasons and in circumstances that are outside the range of experiences in the case studies presented here. In developing countries, often the major rationale for autonomization is to reduce the financial burden on the government’s budget by allowing hospitals to generate their own resources and retain private revenue. Where intractable problems in central government leave public hospitals without access to the financial resources, trained personnel, or supplies they need to function,

autonomous status may serve primarily to legitimize hospital efforts to attract resources from elsewhere: user charges, donors, suppliers, or private capital markets. It appears that even limited reforms of this sort can improve quality and staff retention.

While the small group of cases in this volume do not provide a sufficient basis for a general assessment of this type of reform, the framework for analysis and the practical lessons from case country experiences remain relevant in many developing and transition country contexts. A common developing-country pattern of autonomization allows hospitals freedom to keep private revenue and to procure their own supplies, while retaining central controls over staff and investment. Typically supervision of autonomous hospitals beyond board level is weak or absent. The framework and case study findings bring out the obstacles to rationalization of capacity and the risks of neglecting social functions and of accumulating debts to suppliers or creditors that are likely to result from this limited mode of reform.



## APPENDIX A . CRITICAL SKILLS: PAYING HOSPITALS

The way providers are paid has a demonstrated impact on their behavior in terms of the volume, case mix, and quality of the provided services. Understanding the behavioral incentives embedded in the provider payment mechanisms, therefore, is critical to understand hospital behavior and performance.

### Global budget

*Global budgets are the equivalent of an overall spending constraint imposed, almost always prospectively, on providers. It involves purchasers' paying providers an agreed sum of money over a defined period to deliver a range of services. At its most basic, a global budget commits a purchaser to paying a fixed amount for unlimited access to services provided by a facility (e.g., a local general hospital) with payment normally in 12 monthly installments. There may or may not be indicative targets for activity or workload level.*

How to determine the size of a global budget is one of the key issues. Often, global budgets are based on the previous year's pattern of work modified by changes in circumstances or needs projected for the following year. The budget size may also reflect a more "needs-based" approach by linking allocations to the number of inhabitants in the hospital's catchment area.

Global budgets can include indicative targets for activity or workload—including floor and ceiling estimates and even a description of the requisite case mix. In the absence of such targets, providers may have incentives to minimize the number of patients treated and the amount of care given to each patient since the money received will be the same. If volume floors and ceilings are established, it is a good idea to specify what happens in case of underservicing (below the specified volume) and overservicing (above the specified volume). In case of underservicing, providers may not receive the full value of the contract. In case of overservicing, if the funding agency considers it legitimate, it may allocate additional resources.

In general, payer complexity increases with the complexity of the budget formula, and whether it includes only historical budgets or also activity targets, case-mix adjusters, or other risk and social equity adjusters.

If the hospital has residual claimant status (can keep unassigned revenues and hard budgets are enforced), global budgets put the provider at financial risk. This means the facility can keep a budget surplus at the end of the payment period for use as it sees fit; and spending above the target must come from other, additional hospital resources. In such cases, once a budget is established, providers must remain within the budget by adjusting the price or cost of services or adjusting their volume.

Advantages of global budgets include simplicity, minimum administrative cost, guaranteed income for the provider, and guaranteed access for the purchaser to the basic block of services. Global budgets are established to constrain growth in the price and volume of services while allowing providers autonomy to use resources within budget limits. It allows for strong central control when management skills in local regions are inadequate and provides for predictable levels of budgets and expenses.

Among the disadvantages of global budgets are that they provide incentives to skimp on quality of care and to engage in risk selection and provide few incentives to improve microefficiency despite helping contain costs. There is no quality control inherent in the global budget framework. Where providers' incentives to pursue the financial bottom line increases (as is the case with organizational reform), quality could be compromised. Furthermore, global budgets provide incentives for hospitals to avoid complicated cases and seek out simple ones. To address these problems, activity targets, including expected case mix, are important.

Almost every health system ends up using global budget limits for most of the hospital budget—for reasons of financial control and the complexity of controlling finances under other options. These weaknesses relate to simple global budget contracts with little monitoring or enforcement—not to more complex global budget contracts with decent monitoring and performance incentives at the margin.

### **Line-item budget**

*Line-item budgets are characterised by the allocation of resources to hospitals by input categories such as salaries, food, medicines, and laundry. The current year's allocation primarily reflects historical budgets plus some inflation factor. Reallocation across categories and from one budget year to another are limited or nil.*

Line-item budgeting can also be thought of as a particular kind of global budget. Therefore, the incentives of line-item and global budgeting are similar. Global budgets allow providers to freely allocate resources among various input categories while line-item budgets do not. This is the main difference between them.

Because line-item budgeting offers no possibility for reallocation among cost centers, it has some disadvantages that other global budgets do not. In particular, it can tie hospitals to inefficient methods of service delivery as it provides no incentives to reduce the use of inputs, on which budget allocations are based. As a result, line-item budgets perpetuate high fixed resources, as line-item allocations rarely change. There are also incentives to maximize the use of resources generously provided in line-item budgets. For example, there are no incentives to remove excess capacity, which may lead to a reduction in the facility's budget. This disincentive does not exist under global budgeting.

On the positive side, if line-item allocations are linked to input norms, this method of budgeting will assure at least a minimum standard in each facility.

### **Retrospective fee-for-service reimbursement**

*Under a retrospective fee-for-service system, the hospital bills the payer for the services rendered, and the payer reimburses the hospital at an agreed price for each service. Units of payment can be disaggregated into service units or bundled into bigger units of days (per-diem reimbursement) or episode (reimbursement per admission or per discharge). Workload measures may be specified as minimums or maximums.*

The method of setting the fee-for-service reimbursement level varies widely across hospitals and countries. The main source of variation is the unit of reimbursement. Some hospitals bill for

every service rendered a patient. All tests, services, and other resources used must therefore be recorded.

Alternatively, the service units can be “packaged” or “bundled” into more convenient units, reducing the administrative cost of billing. For example, services provided in hospitals such as tests, drugs, and hotel costs can be aggregated into days (referred to as per-diem reimbursement). Outpatient treatments can be aggregated into visits or courses of treatment rather than itemized by test and treatment. The greatest degree of bundling is a flat charge for the entire patient episode, payable on admission or discharge.

The retrospective fee-for-service reimbursement mechanism puts purchasers at financial risk. The provider’s revenues are equal to the price times the volume of service provided. Thus, fee-for-service reimbursement induces providers to maximize their income by maximizing the volume of services provided. This encourages maximization of all aspects of work, including the number of tests, procedures, follow-up consultations, and intensity of treatment. If the fees are set on a per-diem basis, maximizing income means maximizing the length of stay for each patient. Reimbursement per admission or per discharge encourages maximizing the number of inpatients. This can lead to the provision of unnecessary medical care that offers no health benefits at best or might be harmful to patients.

Despite maximizing provider effort, the fee-for-service reimbursement mechanism has few incentives for efficiency and makes cost containment difficult.

## **Prospective case-based payment**

*In a prospective case-based payment system, the payment for specific care episodes is determined in advance of the services provided. Care episodes are typically grouped into various disease groups or treatment groups.*

The best known example of case-based payments is the diagnosis related groups (DRGs) used in the United States. DRGs were introduced as an alternative to retrospective reimbursement by the first Reagan administration in the 1980s, primarily as a measure to control hospital costs in federally funded health care programs. The philosophy behind DRGs is one of describing the output of a hospital based on the expected requirements of the patient illness being treated (McGuire 1991). Although each patient has unique needs, the resources used to treat the patient’s illness can be described using a small number of medically and statistically defined groups. Reimbursement rates are set to reflect the expected average cost for a particular DRG.

Initially, DRG codes were based on the International Classification of Diseases (9<sup>th</sup> revision) with clinical modification (ICD-9CM), a coding system for diagnoses and procedures. There were around 470 DRGs, but there have been a number of revisions since then, largely to reflect new diseases and treatment methods. However, the addition of these new codes has had a relatively minor effect on DRG statistics (McGuire 1991). Assignment of patients to DRGs is based on ICD-9-C coded diagnostic, procedures and patient characteristics such as age, gender, and discharge status. Revisions in the codes, code assignments, and the definition and scope of what constitutes a complication are constantly being undertaken by the U.S. Health Care Financing Administration. Australia, the Nordic countries, and the United Kingdom have developed their own DRG-classification systems, some of them based on ICD 10.

Forms of prospective payment by DRG have also been introduced in Brazil, Chile, and some other middle-income countries. In Brazil the reimbursement fee schedule includes around 2,000 procedures organized into 266 groups assigned fixed reimbursements. Theoretically, diagnostic groups are clinically related and have similar costs. Reimbursements are divided into four major components: room and board, professional service, diagnostic tests and special therapies, and consumables and drugs (World Bank 1994). The fixed reimbursements for each procedure are not intended to meet the cost of the patient's care but to ensure that the monthly operating costs of the hospital are covered (Chiyoshi 1993). This suggests that cross-subsidizing between and within specialties occurs.

In Chile, the payment system operates with a much smaller number of DRGs, which greatly simplifies the classification process. Currently around 20 diagnostic groups account for around 60 percent of expenditures. For the remaining 40 percent of procedures, not enough is known about prices, and they are covered under management contracts and prospective budgets.

Prospective payment systems by case, using DRGs or similar reimbursement mechanisms, reduce incentives to overtreat, permitting cost containment and generating data and information. With appropriate adjustment for case mix, prospective payment can maintain equity objectives.

The main objective of prospective payment is to control costs and encourage microefficiency. The main incentive for providers is to deliver inpatient care as cheaply as possible. With DRGs hospital revenue is constrained by relatively fixed prices and volume. To stay in business, hospital managers have to reduce expenditures per case. Most frequently, hospitals do this by reducing length of stay, cutting out unnecessary tests, and avoiding duplication.

Reducing costs may not always be efficient, particularly if service quality is compromised, health outcomes worsen, and further interventions and readmission become necessary. For example, shortening length of stay fueled speculation that earlier discharge could lead to higher rates of mortality, morbidity, and readmission—a “quicker and sicker” problem. These concerns were evaluated in a Rand Corporation study that demonstrated that 30-day and 180-day mortality rates were unaffected by the introduction of prospective case-based payments. This outcome may have been achieved, in part, by intensity in skill mix.

If prices are fixed across all providers, competition will be based on nonprice factors such as quality of service, shorter waiting times, and the quality of the hospital environment. Quality competition is particularly likely for “profitable” patients whose treatment is expected to cost less than the DRG reimbursement. Fixing rates across all providers avoids rewarding high unit cost providers unfairly. Rewarding high unit cost providers creates difficulties—it may be appropriate to reward those who provide better quality but not inefficient ones.

Case-based payment systems may be associated with three types of perverse incentives for providers.

**Case-mix selection.** Case-mix selection can occur if providers are allowed to select the patients they treat. This is important because even within DRGs, some patients may be older, sicker, or more likely to have a treatment costs above the DRG average. Assuming payments are based on DRG average cost, profit-maximizing hospitals have an incentive not to treat these patients. Such hospitals would prefer to cream skim, treating simple cases, minimizing costs, and retaining any excess of income over expenditure. To forestall cream skinning, case-mix adjustment within DRGs, though complex, must be adequate.

**Cost shifting.** Cost shifting occurs when providers can transfer the responsibility for patient care onto other agencies. This is common where providers are paid a fixed sum of money to provide a package of care. For example, providers can reduce hospital costs for patients covered under a prospective payment systems by substituting community for hospital-based care.

**DRG creep.** DRG creep relates to the classification of patients into the most remunerative DRG possible by undertaking additional diagnostic tests and identifying additional health defects and problems.

Other inadequacies of the DRG reimbursement system include:

**Incomplete coverage.** DRGs do not cover psychiatry, outpatients, or physician fees. This is a problem if fee-for-service payment is used for the uncovered items, as it can shift costs, for example from inpatient to outpatient care. As a consequence, the introduction of DRGs promoted technological change such as day-case surgery, which can be beneficial but in many cases is of unproven efficiency (Maynard and Bloor 1995). However, using global budgets for uncovered items (as in Chile) lessens the incentive to shift costs. Relative value physician fees, a form of DRGs for physicians, have been implemented in U.S. Medicare (Hsiao 1988), which extends over inpatient and outpatient care. DRGs can also be used in outpatient departments and have been adopted in some countries.

**Sticky prices.** DRG prices, once fixed, are difficult to change, regardless of advances in technology and falling unit costs. DRG prices fixed up to 10 years ago can therefore offer providers increasing profits over time (Maynard and Bloor 1995). Continually deriving and adjusting DRG prices has considerable transaction costs as the revision process is contentious.

**Data requirements.** Use of prospective payment by case has the advantage of producing useful data about charges and activities, but this requirement for data can reduce its use in countries where such data are not routinely collected.

## APPENDIX B. CRITICAL SKILLS: CONTRACTING WITH PUBLIC HOSPITALS

Learning to design and negotiate contracts is an indispensable skill both for health care providers and purchasers under increasingly market-based reforms. A contract specifies the range, volume, and quality of services the provider is to deliver during a future time period. This is in contrast to arrangements in many countries that base public finance allocations on existing facilities and staff regardless of their volume and quality of services. Contracts are a vehicle for linking public finance or social health insurance funds to results defined as desirable. For the purchaser, contracts can be a powerful mechanism to drive policy implementation while leaving the “hands-on” management of services to providers.

An autonomous public provider has much freedom in managing its facilities, equipment, personnel, and other inputs. It can respond to the requirements of the purchaser as specified in the contract, and its success is measured by the appropriateness, volume, quality, and cost of its services. By prescribing performance expectations, a contract can instill a “performance culture” in managers and personnel, encouraging them to seek better ways of doing things.

Successful reform design requires complementary reforms in the external environment to underscore market forces and emphasis on performance. How does the purchaser use contracts to improve performance after providers have been selected?

### Legal status of contracts in the public sector

Within the public sector, not all organizations have the legal standing to enter into binding contracts with other public sector organizations. Enforcing contracts signed by budgetary units can be particularly difficult. With organizational reform, the legal status of providers and the legal regulations governing their actions must be clarified. Most countries with corporatized hospitals design a separate set of laws to govern the behavior of hospitals instead of subjecting them to state-owned or private company law. This allows the specifics of the health sector context to be taken into account.

The following are some examples of “**contracts**” in the health sector, showing different ranges of “legality”:

- ❑ A contract between a public sector organization and a privately owned hospital (or other private health services provider) to provide services for public patients. This would be a legal contract.
- ❑ A contract between a social health insurance organization and a privately owned hospital (or other private health services provider) to provide services for insured patients. This would also be a legal contract.
- ❑ A contract between a public sector organization and a statutory authority organization providing health services. This would probably be a legal contract depending on the legal basis of the statutory authority.
- ❑ A contract between one layer of the public service controlling a health budget (e.g., a province) and another layer providing services (e.g., a district or a public hospital). This is

not a legal contract since the two are part of the same legal entity and a legal entity cannot contract with itself.

The common use of the term “contract” in the health sector does not necessarily imply legal force. It typically refers to any form of document that, essentially, provides a quantified specification of the health services outputs expected from given financial inputs within a given time period and which is used to guide and control the behavior of both the payer of those financial inputs and the provider of the specified services outputs. Other terms that might be used include called “**service agreements**” or “**performance management agreements**.” But even “agreement” may be misleading since, legally, there may be no difference between an agreement and a contract. Within the public sector it may be more accurate to call such documents “**service performance specifications**.”

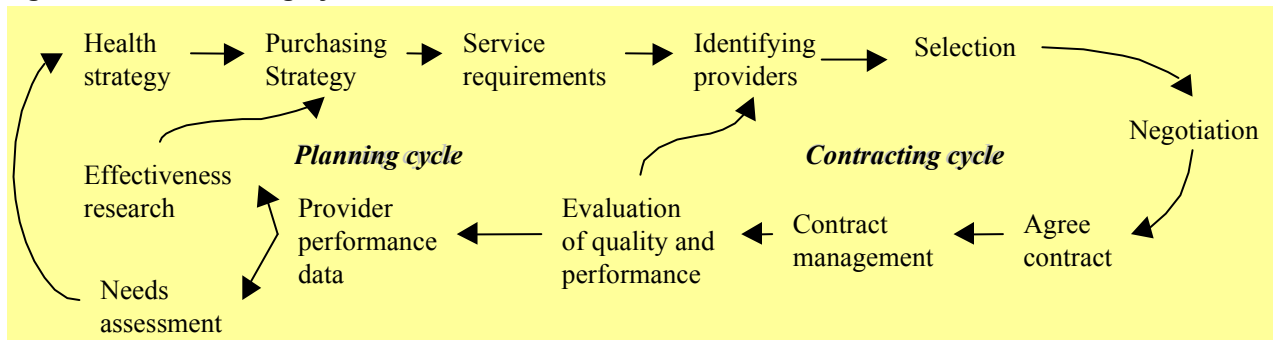
**Purpose of a contract**

A contract provides the means to establish an agreement about issues of significance to the relationship between a buyer and a seller. A contract can be used for a “one-off” sale but is much more important for long-term exchange relations such as ongoing health care service delivery. The contract serves to make the relationship between buyer and seller smoother and less costly by making each party clear on their respective responsibilities. As such, contracts establish legitimate expectations between the transacting parties.

**The contracting cycle**

Contracting is one component of the broad planning cycle. This cycle is directed at linking health system priorities with service provision and the budgetary process.

**Figure B1. Contracting cycle**



Source: Ovretveit.

## Types of Contracts

Contracts can be grouped in various ways. Here, we group them by type of payment and level of specification of services. Based on these categories, we distinguish among three types of contracts: block contract, cost-volume contracts, and cost-per-case contract.

**Table B1. Contracts and payment mechanisms**

Contract type	Payment mechanism	Level of service specification
Block contract	Global budget	Broad category
Cost-volume contract	Fee-for-service	Service
Cost-per-case contract	Case-based	Case

The nature and volume of services to be provided under contract can be specified in varying degrees of detail as can the way in which services are linked to financial compensation. Initially, services specifications can be fairly crude but can become more sophisticated as data are generated and analyzed over time. They can be based on correcting known inequities and inefficiencies in the current delivery system and getting change moving in the right direction. But as soon as possible, a quantified health services plan should be developed for the population concerned so that the purchasing agency can decide how to allocate its financing among providers. The plan should show the incremental stages (e.g., annual changes) of moving from what exists toward what is required and what this will cost at each stage.

## What does a contract look like?

A contract or services performance specification should cover the following:

**Preamble.** A statement about the purpose of the contract, what it aims to do, and who the contracting parties are. From the outset, it is important to stress the behavior expected of the two parties, including recognition that the approach requires risk sharing, that innovation will not be deterred, and that potential problems should be raised early enough to be managed. The contract should be identified as part of a process of creating an effective, positive, problem-solving culture. If a contract is perceived as a one-sided (threatening) document, not part of a whole system of managing the overall service, it can create behavior that seeks to hide potential problems instead of managing them.

**Authorized persons and signatures.** Identification of the individual—from both the purchaser and the provider—who signs the contract and who is responsible for ensuring fulfillment of its terms

**Contract period.** The time period covered by the contract (and, possibly, the assumed arrangements for its renewal subject to satisfactory performance)

**Summary content.** A summary of any key points that the contract incorporates (e.g., any significant changes required in services). This may also usefully identify the key undertakings and commitments of both parties.

**Levels of services and access.** A summary of the health services that will be delivered (details should be given in a separate attached schedule) and a clear statement on who is to have access to the service

**Quality standards.** A summary of the standards required for services (details should be given in a separate attached schedule). The agreement should attempt to specify the quality standards expected for each service covered, and again, this can be done in various level of detail. In practice, it is more useful to keep quality standards simple with an emphasis on key priorities. For example, general standards can require the provider to:

- ❑ Have in place an explicit quality improvement program including clear statements of purpose, targets, and responsibilities in its business plan.
- ❑ Heed national legislation and guidance on services and priorities.
- ❑ Undertake a regular audit and develop explicit standards.
- ❑ Maintain records of problem incidents major complaints, periods of drug shortages, average and maximum patient waiting times, and the like.
- ❑ Ensure that health promotion activities are integrated in the delivery of services and that healthy workplace targets are set and observed.

Standards can be also set for specific patient services in terms of, for example:

- ❑ Inpatient admission procedures and waiting times
- ❑ Outpatient appointment systems and waiting times
- ❑ Casualty services procedures and waiting-time targets
- ❑ Number and qualifications of personnel available at all times and for specific services
- ❑ Procedures for patient discharge and follow-up.

**Finance.** A summary of the level of financing to be available to the provider (details and other financial considerations should be contained in a separate attached schedule).

### **Terms of the agreement**

The agreement should also cover:

- *Monitoring and reviews.* The principles of joint monitoring and review, when progress reports shall be exchanged, and when formal reviews of the contract shall take place
- *Changes in the agreement.* The procedure for making changes (normally in writing and mutually agreed)
- *Best endeavors.* The duty of both parties to resolve matters without arbitration, if possible
- *Arbitration.* What happens if the two parties cannot resolve a dispute and an arbitrator is required—who it will be and how it will be appointed
- *Statutory regulations.* A notation that both parties must be acquainted with and act in accordance with all relevant legislation and national policy (they must anyway but this can be a useful reminder of any particularly relevant legislation or national guidelines)
- *Confidentiality.* Patient confidentiality is to be assured.

- *Payments.* What the purchaser is to pay the provider, when (e.g., one twelfth of the annual contract price each month).

**Attached schedules.** Any number of schedules can be attached to a contract, by simplicity offers advantages. The minimum should include:

- Schedule 1            Services to be Provided and Contract Pricing
- Schedule 2            Quality Standards to be Achieved
- Schedule 3            Finance to be Allocated

Information requirements and reporting formats can be defined within the schedules or as a separate schedule, if useful. Other possibilities include: procedures for audit, monitoring, and evaluation, and provisions for academic activities (if the provider is involved in education). Contracting within the public sector may also wish to include schedules on: capital investment programs and procedures; human resource plans including development and training; organizational development procedures and targets. However, purchasers should resist the temptation to use contracting to micromanage providers. Basically a contract must set out only what has to be done. How it is done should rapidly become the responsibility of the provider.

## APPENDIX C. CRITICAL SKILLS: MONITORING AND EVALUATING HOSPITAL PERFORMANCE

This appendix presents measurement indicators for four dimensions of hospital performance including technical efficiency, allocative efficiency, quality, and equity. Since the manifest inefficiency of government-owned and operated hospitals is one of the most important motivations for hospital reform, tracking the impact of reform on efficiency is a high priority. However, opponents of hospital reform frequently point to reductions in quality or equity or increased corruption as side effects of reform so detrimental to public well-being as to negate any purported efficiency improvements. Thus, the complete story of the impact of hospital reform can only be told with measures on all four dimensions.

### Technical efficiency

A production process is technically efficient if it wastes nothing. If the hospital's existing inputs can be reorganized to produce more with no more resources, the hospital was not previously operating efficiently. Alternatively if the existing flow of outputs could be maintained with fewer or less costly inputs, the hospital is not currently efficient. Technical efficiency can thus be measured by any of a list of indices of hospital output per unit of hospital input. In outpatient clinics, patients seen per clinic hour is a useful measure. In inpatient wards, average length of stay and bed occupancy rate are useful and frequently used measures of technical efficiency.

These measures of technical efficiency apply, theoretically, only if the quality of the output (e.g., health outcomes, consumer satisfaction) is held constant. However, the measurement of "quality-adjusted" output is in fact quite difficult. Therefore, we follow the practice of other authors and separate quality into a second dimension.

**Table C1. Technical efficiency indicators**

INPUT	PROCESS	FINAL
Monetary inputs - Total revenue - Total expenditure - Expenditures on personnel and drugs	Capacity utilization - Case-mix adjusted bed utilization <sup>b</sup>  - Case-mix adjusted capacity utilization of (other) medical equipment	UNIT COST - CASE-MIX ADJUSTED COST PER OUTPATIENT VISIT - CASE-MIX ADJUSTED COST OF SURGICAL INTERVENTION  - CASE-MIX ADJUSTED COST PER INPATIENT CASE FINANCE  - NET OPERATING BALANCE PER PATIENT - NET OPERATING BALANCE PER BED DAY  SERVICE MIX - TOTAL HOSPITAL COMPENSATION (R) - MARGINAL COST (MC) - $R_i / R_j = MC_i / MC_j^c$  HEALTH OUTCOME - PERINATAL MORTALITY RATE - CASE FATALITY RATE
Physical inputs - Medical staff (Number of qualified medical staff, percent of absenteeism of medical staff) - Availability and state of medical equipment and supplies <sup>a</sup>	Labor productivity - Outpatient visits per physician per day - Inpatient cases per physician per day	

*Note:* To provide guidance to evaluators facing a severe time or budget constraint, indicators that are more difficult or expensive to collect are flagged by small capitals, while the easier to collect indicators appear in normal type. We refer to these respectively as comprehensive and rapid indicators. As implied by these designations, we believe that the quality of an evaluation will suffer if only rapid indicators are collected.

a. Percent of available and usable essential medical equipment and supplies.

b. ALOS, occupancy rate, turnover rate.

c. See Appendix A.

---

## **Allocative efficiency**

---

While technical efficiency is a matter of achieving the maximum output with any given mix of inputs, allocative efficiency means producing the “correct” mix of outputs using the “correct” mix of inputs. Technical efficiency is doing things right, while allocative efficiency is doing the right things.

Society will view some hospital services as “social functions” that deserve some protection from the forces of the marketplace. Measuring the “allocative efficiency” dimension of hospital performance requires the identification of some hospital services as serving social functions more than do other hospital services. The criteria for selecting these services could be derived from public economics (i.e., services that are public goods or produce positive externalities deserve protection), but government decisionmakers may sometimes identify a hospital service as a “social function” for other more political or subjective reasons. However the hospital’s social functions are identified, the allocative efficiency dimension of hospital performance can then be judged by measuring the production of both social functions and other services over time. If the hospital’s production of social functions slips backward after reorganization, either relative to other hospital outputs or relative to the population to be served, there is cause for alarm on this dimension.

Setting aside the problem of protecting social functions, two special features of the market for hospital services can impede the achievement of allocative efficiency. First, third-party payment provisions may elicit overuse of one service and underuse of another because the ratio of the prices paid by the patient for the two services bears no relation to their relative costs. An example is when patients bypass nearby primary care facilities to go directly to the hospital, because the hospitals’ more costly care is cheaper to the patient. Overuse of health care in response to third-party payment provisions is called “moral hazard.” Organizational reform can address it by instituting nominal charges for the more costly service. For example, some reforms introduce “bypass fees” charged to patients who come to the hospital without having been referred by a primary care center.

At the input stage of the production process, the most important issue related to allocative efficiency is the relative compensation received by different categories of personnel. It is important to collect data on wages paid by the hospital before and after the reform and to compare those wages not only across categories within the hospital but also with other comparable employers outside the hospital setting. When these wage ratios do not accurately reflect the relative values of categories of personnel to the hospital production process or are higher or lower than wages paid for comparable work outside the hospital, every area of hospital performance is threatened.

**Table C2. Allocative efficiency indicators**

INPUT	PROCESS	FINAL
Physical input mix - Physician and nonphysician medical staff - Staff and medical supplies Input price ratio - Wage of physician and nonphysician medical staff - Wage of physician in the public sector or private sector	Internal rationing mechanism - Price mechanism - Nonprice mechanism	FEES, COPAYMENTS AND OTHER INCENTIVES USED TO: - LIMIT MORAL HAZARD WITH RESPECT TO NONSOCIAL FUNCTIONS - LIMIT EXCESS DEMAND - LIMIT BYPASSING OF PRIMARY HEALTH FACILITIES - ENCOURAGE USE OF SOCIAL FUNCTIONS REWARD TO PROVIDER USED TO: - IMPROVE QUALITY OF CARE - ENCOURAGE PRODUCTION OF SOCIAL FUNCTION SERVICE MIX - FEES OUT OF POCKET (P) - TOTAL HOSPITAL COMPENSATION (R) - $P_i / P_j < R_i / R_j$ NUMBER OF PATIENTS BYPASSING PRIMARY HEALTH CARE

## Quality

Because of information asymmetry, an essential aspect of measuring the impact of organizational reform is to track its impact on the quality of care. There is substantial discussion in the literature about how to measure quality of care. Some of the disagreements among authors stem from a failure to distinguish measures by the stage of the production process.

*Input stage.* The simple availability of specific drugs has been used as an index of the quality of care in rural primary health care facilities. This index is obviously imperfect, since it can not capture how effectively drugs are used when they are available. But in the absence of other measures, it is informative to know that some facilities have basic drugs in stock while others do not.

*Process stage.* Indices from the input stage can be supplemented by process measures of quality, such as an index of how well the hospital maintains patient records from one visit to the next. A more difficult, but more revealing, measure of process quality is for an expert physician to observe patient treatment and judge the adequacy of treatment protocols. Several analysts have emphasized comparison of treatment procedures to accepted standards for quality care.

*Output stage.* The most useful measures of quality include measures of outcome from the final stage of the production process—such as rates of adverse outcome from specific procedures adjusted for the severity of presenting cases, or rates of iatrogenic diseases such as staphylococcus infections in hospital wards.

**Table C3. Quality indicators**

INPUT	PROCESS	FINAL
<input type="checkbox"/> Number of qualified medical personnel	<input type="checkbox"/> PERCENT OF TREATMENT ACCORDING TO DEFINED PROTOCOL	<input type="checkbox"/> HEALTH OUTCOME <input type="checkbox"/> MORTALITY RATES ADJUSTED BY SEVERITY
<input type="checkbox"/> Availability and state of medical	<input type="checkbox"/> AVAILABILITY OF PATIENT HISTORY	<input type="checkbox"/> RATE OF ADVERSE OUTCOME FOR SELECTED SEVERITY-ADJUSTED CONDITIONS
<input type="checkbox"/> Equipment (percent of available and usable essential medical equipment)	<input type="checkbox"/> PATTERN OF DRUG ADMINISTRATION	<input type="checkbox"/> RATE OF HOSPITAL CAUSED INFECTION (IATROGENIC DISEASE)
<input type="checkbox"/> Availability and state of medical supplies (percent of available and usable essential medical supplies)		<input type="checkbox"/> RATE OF POSTOPERATIVE INFECTION RATES
		<input type="checkbox"/> RATE OF EMERGENCY READMISSION WITHIN 2 WEEKS OF DISCHARGE
		<input type="checkbox"/> - RATE OF RETURNING TO OPERATING THEATER FOR THE SAME CONDITION
		<input type="checkbox"/> - FREQUENCY OF CHANGED DIAGNOSIS FOR OUTPATIENTS
		<input type="checkbox"/> PATIENT SATISFACTION

## Equity

An analysis of the equity impact of reform can begin by examining the impact of the reform on the mix of patients to see if either the percentage or the number of poor patients served has fallen.<sup>2</sup> This measure of equity at the input stage of the production process can be supplemented by reexamining any of the measures of the quality of care at the process or final product stages with a view toward learning how that index of quality is distributed according to the income class of the patient. For example, are drugs less available to poor patients than prior to the reform? Or are poor patients less satisfied with the care they receive?

Analyses of the equity impact should not be restricted to the hospital undergoing reform but should look at the reform's impact on access by the poor to health care in general. Sometimes the poor are discouraged by higher fees from presenting minor complaints at a hospital's outpatient clinic, but find equally good care in less expensive primary health care facilities outside the hospital. In this case the reduced percentage of poor patients in the hospital's patient mix might be interpreted as an improvement in allocative efficiency, with little offsetting reduction in quality or access. While collecting data on health care utilization of the entire local poor population before and after hospital reform is expensive and time consuming, the analyst who wants to measure the impact of reform on equity should collaborate with local statistical offices and poverty programs in order to identify a more population-based measure of access to care than would be available from the hospital's patients alone.

Another way in which superficial analysis might suggest a reform to be inequitable when its net effect is in fact equity enhancing involves the reform's effect on the practice of requesting side-payments from patients. The existence of such side-payments in many government hospitals and the fact that poorer patients are rarely exempted from their payment means that the hospital's apparently pro-poor pricing policy is much less equitable than it seems. A hospital reform that raises the official prices but eliminates side-payments may appear to raise the price of care to the poor when it actually reduces the net cost of care for that group. Exit polls that are designed primarily to measure patient satisfaction can also capture the effect of reform on the net price the patient must pay and thus allow inferences about the true impact of the reform on prices paid by the poor.

**Table C4. Equity Indicators**

INPUT	PROCESS	FINAL
Rationing of services by price	Use of medical services	PERCENT OF UNFULFILLED NEEDS BY SOCIOECONOMIC INDEX
Exemption	- Mean physician visit by socioeconomic index	
Government expenditure per patient by socioeconomic index		HEALTH OUTCOME BY SOCIOECONOMIC INDEX
Rationing of services by time	- Mean number of use of selected services by socioeconomic index	
- Appointment waiting time		
- Office waiting time		
	USE RELATIVE TO NEEDS BY SOCIOECONOMIC INDEX	
Geographical barrier	- THE USE-DISABILITY RATIO	
	- THE SYMPTOM RESPONSE RATIO	

### Trade-offs among objectives

The fact that hospital reform can only be evaluated by examining its effect on four distinct dimensions of performance implies that a reform might do well on some dimensions but poorly on others. What if, as in the cases examined by Govindaraj and Chawla (1996), efficiency improves while equity worsens?

When hospital reform improves some measures of performance but worsens others, policymakers will ask whether a somewhat different reform design could have achieved the observed gains with less of the observed costs. Collecting data on all stages of the production process in all of these dimensions may give health sector decisionmakers the information they need to answer this question or will at least suggest possible alterations in reform design to achieve the desired gains with fewer offsetting performance reductions. But in the last analysis the policymakers themselves must decide, with input from all the appropriate constituencies, which combination of performance objectives for public hospitals best meets the nation's needs.

**Table C5. Trade-offs among objectives**

Objective	Adverse impact	No change	Some improvement	Substantial improvement
Efficiency		Zimbabwe, Ghana	India, Kenya	
Quality of Care and Public Satisfaction		Kenya, Zimbabwe	India, Ghana	
Equity	Zimbabwe, Ghana	India, Kenya		

Source: Govindraj and Chawla, 1996



---

## BIBLIOGRAPHY

- Barnum, H. and J. Kutsin. *Public Hospitals in Developing Countries: Resource Use, Cost, Financing*. Baltimore: The Johns Hopkins University Press, 1993.
- Bennett, S. "Promoting the Private Sector: A Review of Developing Country Trends," *Health Policy and Planning* 7 (2): 97–110 (1992).
- Berryman, S.E.; N. Boyle; F. Golladay; M. Holmes; P. Keefer; and K. Sigrist. "Assessing Institutional Capabilities." Unpublished manuscript.
- Boubakri, N., and J-C.Cosset. "The Financial and Operating Performance of Newly Privatized Firms: Evidence from Developing Countries." *Journal of Finance* 53: 1081–1110 (June 1998). [http://www.cob.ohio-state.edu/~fin/journal/archive\\_papers/issjun98/ms5897.pdf](http://www.cob.ohio-state.edu/~fin/journal/archive_papers/issjun98/ms5897.pdf)
- Casagrande, J. "Social Sector Privatization in Mongolia: Concepts Learned through Experience," Private Sector Development Department. Unpublished manuscript, World Bank, 1999.
- Donaldson, D.J. "Privatization: Principles and Practice." *Lessons of Experience Series*, no. 1. Washington: International Finance Corporation, 1995.
- Duncan, I., and A. Bollard. *Corporatization and Privatization: Lessons from New Zealand* (Auckland, N.Z., Oxford University Press, 1992).
- Eriksson, P., V. Diwan and I. Karlberg. *Health Sector Reforms: What about Hospitals?* Stockholm: Elanders Gotab, 2002.
- Fama, E.F. "Agency Problems and the Theory of the Firm," *Journal of Political Economy* 88 (2): 288–307 (1980).
- Galal, A.; L. Jones; P. Tandoon;; and I. Vogelsang. *Welfare Consequences of Selling Public Enterprises: An Empirical Analysis*. [New York: Oxford University Press, 1995.
- Girishankar, N. "Reforming Institutions for Service Delivery: A Framework for Development Assistance with an Application to the HNP Portfolio." *World Bank Policy Research Working Paper*, no. 2039, World Bank, Washington, 1999.
- Gregory, R. "Accountability, Responsibility and Corruption: Managing the Public Production Process," in Johnathan Boston, ed. *The State Under Contract*. Wellington: Bridget Williams Books, 1995.
- Gwatkin, D. "Poverty and Equity and Health in the Developing World: An Overview." Unpublished paper, World Bank, 1997.
- Jensen, M.C., and W.H. Meckling. "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure." *Journal of Financial Economics* 3: 305–60 (1976).
- Lane, J-E., ed. *Public Sector Reform: Rationale, Trends, Problems*. London: Sage Publications, Ltd., 1997.
- Lewis, M.A.; G.M. La Forgia; and M.B. Sulvetta. "Measuring Public Hospital Costs: Empirical Evidence from the Dominican Republic." *Social Science Medicine* 43 (2): 221–34 (1996).

- 
- Manning, N. "Unbundling the State: Autonomous Agencies and Service Delivery." Unpublished manuscript..
- Manning, N., and David Parker. "Nationalization, Privatization and Agency Status within Government: Testing for the Importance of Ownership," in P. Jackson and C. Price, *Privatisation and Regulation*. London: Longman Group Ltd. 1994.
- Mathur, S., and G. Torres. *The Third Wave of Privatization: Privatization of Social Sectors in Developing Countries*. Private Sector Development Department: World Bank, 1996.
- McKee, M. and J. Healy. *Hospitals in a Changing Europe*. Buckingham: Open University Press, 2002.
- Milgrom, P., and J. Roberts. "Bargaining Costs, Influence Costs, and the Organization of Economic Activity," in J. Alt and K. Shepsle, eds. *Perspectives on Positive Political Economy*. New York: Cambridge University Press, 1990.
- Milgrom, P., and J. Roberts, *Economics of Organization and Management*. Chapter 9. Englewood Cliffs, N.J.: Prentice-Hall, 1992.
- Millstein, I. "The Corporation as an Ownership and Management Structure." Paper written for the World Bank Private Sector Development Forum, Baltimore, Md., 1998.
- Olson, M. *The Rise and Decline of Nations: Economic Growth, Stagflation and Social Rigidities*. New Haven: Yale University Press, 1982.
- Organization for Economic Cooperation and Development. *Regulatory Reform, Privatisation and Competition Policy*. Paris: OECD, 1992.
- Osborne, D., and T. Gaebler. *Reinventing Government*. New York: Plume, 1993.
- Paine, L.H.W. and F. Siem Tjam. *Hospitals and the Health Care Revolution*. Geneva: World Health Organization, 1988.
- Pauly, M. "Health Systems Ownership: Can Regulation Preserve Community Benefits?" *Frontiers of Health Services Management* 12 (3): 3–34 (Spring 1996).
- Preker, A.S. and A. Harding, Eds. *Innovations in Health Service Delivery: The Corporatization of Public Hospitals*. Washington: World Bank, Forthcoming 2003.
- Robinson, J. "Physician-Hospital Integration and Economic Theory of the Firm." *Medical Care Research and Review* 54 (1): 3–24; discussion 25-31 (March 1997).
- Saltman, R., and J. Figueras. *European Health Care Reform: Analysis of Current Strategies*. Copenhagen: World Health Organization, 1997.
- Sappington, D.E. "Incentives in Principal Agent Relationships." *Journal of Economic Perspectives* 5 (2): 45–66 (1991).
- Schick, A. "No Leapfrogging." Presentation made at the World Bank, 1998.[Draws on his paper, "Why Most Developing Countries Should Not Try New Zealand's Reforms." *World Bank Research Observer* 13: 123–31 (February 1998)].
- Schieber, G., ed. *Innovations in Health Care Financing: Proceedings of a World Bank Conference, March 10–11, 1997*. World Bank Discussion Paper No. 365. Washington: World Bank, 1997.

- 
- Williamson, O. "Comparative Economic Organization: The Analysis of Discrete Structural Alternatives." *Administrative Science Quarterly* 36: 269–96 (June 1991).
- . "Transaction Cost Economics," Chapter 3 in R. Schmalensee and R. Willig, eds., *Handbook of Industrial Organization*. New York: North-Holland, 1989.
- . *Bureaucracy: What Government Agencies Do and Why They Do It*. New York: Basic Books, 1989.
- . *The Economic Institutions of Capitalism: Firms, Markets and Relational Contracting*. New York: Free Press, 1985.
- Wilson, J.Q. *Bureaucracy: What Government Agencies Do and Why They Do It*. New York: Basic Books, 1989.
- World Bank, *Handbook on Good Practices for Laws Relating to Non-Governmental Organizations*. Discussion draft, prepared by the International Center for Non-profit Law, 1997.
- World Bank. *World Development Report 1997: The State in a Changing World*. New York: Oxford University Press.
- . *Bureaucrats in Business—The Economics and Politics of Government Ownership: A World Bank Policy Research Report*. New York: Oxford University Press/World Bank, 1995.
- World Health Organization. *Annual Report 2000*. Geneva.







HEALTH, NUTRITION,  
AND POPULATION



HUMAN DEVELOPMENT NETWORK

THE WORLD BANK

---

#### About this series...

This series is produced by the Health, Nutrition, and Population Family (HNP) of the World Bank's Human Development Network. The papers in this series aim to provide a vehicle for publishing preliminary and unpolished results on HNP topics to encourage discussion and debate. The findings, interpretations, and conclusions expressed in this paper are entirely those of the author(s) and should not be attributed in any manner to the World Bank, to its affiliated organizations or to members of its Board of Executive Directors or the countries they represent. Citation and the use of material presented in this series should take into account this provisional character. For free copies of papers in this series please contact the individual authors whose name appears on the paper.

Enquiries about the series and submissions should be made directly to the Editor in Chief Alexander S. Preker ([apreker@worldbank.org](mailto:apreker@worldbank.org)) or HNP Advisory Service ([healthpop@worldbank.org](mailto:healthpop@worldbank.org), tel 202 473-2256, fax 202 522-3234). For more information, see also [www.worldbank.org/hnppublications](http://www.worldbank.org/hnppublications).



**THE WORLD BANK**

1818 H Street, NW  
Washington, DC USA 20433  
Telephone: 202 477 1234  
Facsimile: 202 477 6391  
Internet: [www.worldbank.org](http://www.worldbank.org)  
E-mail: [feedback@worldbank.org](mailto:feedback@worldbank.org)

ISBN 1-932126-62-7