Hospital care is the largest expenditure category in the health systems of both industrialized and developing countries. Although hospitals play a critical role in ensuring delivery of health services, less is known about how to improve the efficiency and quality of care provided. Much can be learned in this respect from the experiences of hospital reforms initiated during the 1990s. Innovations in Health Service Delivery: The Corporatization of Public Hospitals is an attempt to examine the design, implementation, and impact of reforms that introduced market forces in the public hospital sector.

This book provides the valuable knowledge and experience needed to avoid many of the obstacles that arise in the process of “corporatizing” public hospitals.

—Professor Per-Gunnar Svensson, General Director, International Hospital Federation

A splendid book that is essential reading for health care professionals, policymakers, and health service managers. All will benefit from the expert analysis and well-documented case studies presented here.

—Dr. E.K. Yeoh, President, International Hospital Federation

In a world where we often seem to learn and relearn the same lessons over and over again, this book provides a valuable source of advice to policymakers and practitioners as they work to make things better.

—Sir Alan Langlands, FRSE, Principal and Vice Chancellor, University of Dundee, U.K., and Former Chief Executive, National Health Service
Innovations in Health Service Delivery

The Corporatization of Public Hospitals

Alexander S. Preker
April Harding
Editors

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There is a shift in currency in many health care systems around the world. We are moving away from the old pattern of primary, secondary, and tertiary provision toward integrated networks of care. The old professional hierarchies and established approaches to education and training are making way for a new currency of knowledge, skills, access, information, and teamwork. Many countries are also seeking to redefine the ethos of professional practice and public service in ways that will keep the trust of the people, calling into question traditional forms of professional and public accountability.

As ever, change is endemic in all dimensions and at every level of our health care systems as policymakers and practitioners juggle with rising public expectations, the breathtaking speed of advances in science and technology, changes in the burden of disease, and the resulting imbalances between supply and demand. As media scrutiny increases, people are making the link between the competence of governments and the performance of domestic public services, ensuring that political interest in health systems is more intense than ever.

Amid all this change, some things remain constant. Many countries are as committed as ever to achieving three key results in their health care systems:

*Equity*: improving the health of the population as a whole and reducing variations in health status by targeting resources where needs are greatest,
Efficiency: providing patients with treatment and care that is both effective and a good value, and

Responsiveness: meeting the needs and wishes of individual patients and users.

And despite the trends toward integrated networks of care, hospitals of all shapes and sizes remain central to the provision of good health care, striving to maintain the quality and cost-effectiveness of their services and relying on the skill, motivation, and sheer professionalism of their staff to deliver these services, often in difficult circumstances.

The question of how best to run our hospitals has been a subject of intense interest for decades with a strong focus over the past 15 years on what Alex Preker and April Harding call “marketizing reforms.” In this important book, they seek to understand the design, implementation, and impact of these reforms in a number of different countries. By establishing a powerful conceptual framework, taking care in their analysis, and drawing on the experience and insights of the authors of the case studies, they cast light on the impact of marketizing reforms and identify some of the barriers to the effective implementation of change. In a world where we often seem to learn and relearn the same lessons over and over again, this book and the companion volumes to be published will provide a valuable source of advice to policymakers and practitioners as they work to make things better.

Sir Alan Langlands, FRSE
Principal and Vice Chancellor
University of Dundee, United Kingdom, and
Former Chief Executive
National Health Service
Foreword

From 1992 until 1995 I had the privilege of being Director-General of Health in New Zealand. Graham Scott, Lynne McKenzie, and James Webster write an interesting case study of the New Zealand reforms in chapter 8 of this volume. The authors point to a panoply of factors associated with the reforms that conspired to undermine their success, but to me it boiled down to five main lessons.

First, it is very difficult to remove the partisan political process and the role of government from a corporatized model, and the notional separation between the ownership interest and the public policy interest therefore blur, whatever the apparent firewalls. It is better to recognize this explicitly and deal with it in a transparent manner. The owners regularly engaged with the boards and managers of their newly formed public health corporations, the Crown Health Enterprises (CHEs), oftentimes to avoid political consequences of the CHEs’ intended decisions.

Second, corporatization lifts the veil of hidden subsidies off a public health system. For example, balance sheets had to be created, assets valued, depreciation considered, and liabilities, including contingent liabilities, had to be accounted for. This all required explicit financing. Further, the model suggested relatively easy access to, and exit from, the health system as service providers, and for CHEs the ability to exit from unprofitable services and dispose of poor-performing assets. This proved far harder in practice. Conspiring with lesson one, the expedient thing to do was to minimally take these
things into account and try to avoid creating the impression that the reformed system cost more than the unreformed one.

Third, many features of the model were either not introduced, or abandoned at an early stage. For example, contestability was seen to be an important element of the New Zealand reforms on both the purchaser and the provider side of the reforms. Contestable purchasing was abandoned before the reforms were formally introduced, largely due to legitimate technical considerations but also due to a concern that critics of the reforms would characterize this as an “Americanization” of the health system. On the provider side, efforts to move in this direction were somewhat half-hearted. Similarly, the CHEs were intended to be taxable, an effort to level the playing field, but early on this was surrendered to political considerations. No one decision mattered so much as taken collectively they served to undermine the integrity of the model, and gave encouragement to the critics of the reform process.

Fourth, related to the second point, due to concerns of general fiscal restraint, and the potential of an admission that the reformed structures were more costly than the system they replaced, there was a real reluctance to adequately finance the public health purchasers for the volume of services they felt necessary to meet the rising expectations and health needs of New Zealanders. Indeed, a contrary decision was taken to finance health services by explicitly allowing CHEs to run significant deficits (and thus run down their balance sheets). This was in part due to a belief that there were efficiencies to be obtained (and there were), but beyond that it was clear to those of us involved that there was a significant structural deficit as well and not financing this only served to undermine the purchaser-provider split (since the price and/or quantum of services purchasers needed to buy was greater than the price they could pay).

This, in turn, led to a fifth mistake: reacting to problems by “drip feeding” additional funds into the system, thus creating an atmosphere of perpetual crisis, followed by continuous funding adjustments.

I differ with the authors in some of the interpretation of details, particularly in one specific respect. Ministers and their advisers (including me and Graham Scott, who was secretary of the treasury for
part of this time) considered many of these issues, both in the design and subsequently at each of the many decision steps along the way. There were some in the reform process who consistently underestimated the consequences of these incremental decisions—and, in truth, their consequences are much easier to see in hindsight. But in my opinion, as the political heat turned up, it became irresistible for the government not to tinker to reduce the heat—understandable but, in this case, fatal. This lesson, the impact of the full political economy on the reform process, overshadows the many important, if somewhat arcane, specifics of the reform process. It is a lesson applicable well beyond the “Land of the Long White Cloud.”

The subsequent consolidation of purchasers into a single national authority eliminated whatever vestiges of competitive (or at least comparative) purchasing, and with the election of a new Labour and Alliance Government (both parties opposed the reforms from the outset), the circle was completed with a new set of reforms, which look ever so much like the reforms Labour introduced back in the 1980s. None of this makes me think the possibilities of corporatizing public health assets are any less real, just more difficult to achieve.

Finally, I note that there were many successful and enduring aspects of the health reforms in the 1990s, from new laws on health privacy and health information, to a new New Zealand Health Information Service and the introduction of minimum national data sets, unique identifiers, pioneering work on contracting and purchasing of services, important work done by a National Advisory Commission on Health and Disability Services, and many others, too numerous to mention here.

I hope you find this volume of interest and of value.

James Christopher Lovelace
Director, Health, Nutrition, and Population and Chair, Health, Nutrition, and Population Board
The World Bank, and
Former Director-General of Health, New Zealand
The authors are grateful for reviews provided by Simon Blair, Philip Davis, Jerry La Forgia, and Christopher Lovelace. Invaluable insights from thematic reviews and country case studies were provided by Alexandre Abrantes, Hédi 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, Soe Nyunt-U, Mead Over, Hong Phua, Laura Rose, Graham Scott, Naoko Watanabe, James Webster, and Winnie C. Yip. Kathleen A. Lynch provided the text editing. Deirdre Ruffino provided the copyediting, and Sithie Mowlana assisted with word-processing.
### Acronyms and Abbreviations

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<tr>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>AHBs</td>
<td>area health boards</td>
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<tr>
<td>ARCI</td>
<td>accident rehabilitation compensation insurance</td>
</tr>
<tr>
<td>CCMAU</td>
<td>Crown Company Monitoring and Advisory Unit</td>
</tr>
<tr>
<td>CEE</td>
<td>Central Eastern Europe</td>
</tr>
<tr>
<td>CEO</td>
<td>chief executive officer</td>
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<td>CHEs</td>
<td>Crown Health Enterprises</td>
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<td>CPF</td>
<td>Central Provident Fund</td>
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<tr>
<td>DHS</td>
<td>Department of Human Services</td>
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<td>DRGs</td>
<td>diagnosis-related groups</td>
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<tr>
<td>EFL</td>
<td>external financing limit</td>
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<tr>
<td>FSU</td>
<td>Former Soviet Union</td>
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<td>GMS</td>
<td>government medical store</td>
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<td>HA</td>
<td>Hospital Authority</td>
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<tr>
<td>HCS</td>
<td>Health Corporation of Singapore</td>
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<tr>
<td>HGC</td>
<td>hospital governing committee</td>
</tr>
<tr>
<td>HKSAR</td>
<td>Hong Kong Special Administrative Region</td>
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<tr>
<td>HWB</td>
<td>Health and Welfare Branch</td>
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<tr>
<td>MHCN</td>
<td>Municipal Integrated Health Care Network</td>
</tr>
<tr>
<td>MHD</td>
<td>Medical and Health Department</td>
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<tr>
<td>MHPB</td>
<td>Metropolitan Hospitals Planning Board</td>
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<tr>
<td>MIS</td>
<td>management information systems</td>
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<tr>
<td>MOH</td>
<td>Ministry of Health</td>
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<tr>
<td>MPH</td>
<td>Ministry of Public Health</td>
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<tr>
<td>NEP</td>
<td>New Economic Policy</td>
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<tr>
<td>Abbreviation</td>
<td>Description</td>
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<tr>
<td>NGO</td>
<td>nongovernmental organization</td>
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<td>NHI</td>
<td>National Heart Institute</td>
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<td>NHP</td>
<td>National Health Plan</td>
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<td>NHS</td>
<td>National Health Services</td>
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<tr>
<td>NTUC</td>
<td>National Trades Union Congress</td>
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<td>NUH</td>
<td>National University Hospital</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<tr>
<td>PCU</td>
<td>project coordination unit</td>
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<tr>
<td>PFI</td>
<td>Private Finance Initiative</td>
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<tr>
<td>RHA</td>
<td>Regional Health Administration</td>
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<td>RHAs</td>
<td>Regional Health Authorities</td>
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<tr>
<td>SGH</td>
<td>Singapore General Hospital</td>
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<tr>
<td>SMPHs</td>
<td>self-managed public hospitals</td>
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<tr>
<td>SOE</td>
<td>state-owned enterprise</td>
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<tr>
<td>TPP</td>
<td>total purchasing project</td>
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<tr>
<td>WHO</td>
<td>World Health Organization</td>
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Introduction

Despite much attention and emphasis on primary care as a first point of contact for patients, hospitals in most countries remain an important source of critical health care services, providing both basic and advanced care for the population. Hospitals are often the provider of last resort for the critically ill and poor. Yet hospitals also comprise the largest expenditure category of the health system of both industrial and developing countries. As a result, although their critical role as an integral part of the health system is well recognized, hospitals are often the target of health sector reforms aimed at efficiency, equity, and quality improvements and more systemic reforms in financing and the health care delivery system.

This volume provides some insights about recent trends in the reform of public hospitals, 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?

Why Look at Autonomization, Corporatization, and Privatization of Public Hospitals?

Decentralization, which dominated much of the discussions on structural reforms in the public sector during the 1960s and 1970s in
industrial countries, arrived in the developing world during the 1980s. By that time, Western Europe had turned its attention to improving the performance of government-owned services through organizational reforms of the service providers themselves. This included altering the incentive regime that managers within the organizations were 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, have included: (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 concluded that the performance problems of public hospitals were similarly grounded in the rigidity of hierarchical bureaucracies, the lack of control by managers over day-to-day operations of their facilities, and the absence of performance-based incentives. Having successfully applied new public management techniques and marketizing reforms in other sectors, it was a natural step for policymakers in some countries to consider applying 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 and Crown Health Enterprises in New Zealand, drew worldwide interest. Soon many developing economies such as Hong Kong, Malaysia, Indonesia, Tunisia, and Argentina were attempting similar reforms. Often they were accompanied by parallel reforms in the overall health pol-
icy 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 traditionally paid for health services through social insurance, inpatient services have always been provided through a mixture of public, semiautonomous 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 indeed play a productive role in a well-functioning health system. Hence, the endpoint of these reforms is not really at issue. What is at issue is, when does it make sense to move from an integrated public system to a system with independent hospitals, and how should it be done? 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? The research presented in this volume was motivated by a desire to assemble available information to try to answer this question.

**Scope of the Volume**

This volume examines marketizing organizational reforms, that is, reforms that relied on the combination of increased independence, and market-based performance pressures. While privatization is such a reform, we will not examine that reform in this volume, concentrating instead on autonomization and corporatization reforms, which
keep the hospitals in the public sector. This volume includes cases from both industrial and developing countries. A core concern of these reforms is hospital governance, and this volume looks closely at this issue. For the sake of clarity and comparability, we have chosen to focus on the governance issues between the relevant ministry or ministry officials and the hospital. In his thesis, Klaus Pugner refers to this as the level of “secondary governance.” Hence, we will not be examining in any detail the political governance issues related to how the representative bodies (parliaments) are holding ministries accountable for health sector and hospital performance. Neither will we look into issues related to governance within the hospital (how managers are holding departments accountable).

Need for More Research and Analysis

This volume is a first attempt to conduct a systematic, if subjective, review of autonomization and corporatization of public hospitals. It should not be considered a definitive statement on this subject but an opportunity to crystallize key questions about objectives, design, implementation, and evaluation of such reforms. It highlights 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 resource governance, resource allocation/purchasing arrangements, and market environment that are needed for successful reform

• Ways to achieve more rigorous and ongoing 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.

Research the World Bank is now undertaking in these areas will be published in companion volumes to this first volume on Innovations in Health Service Delivery: The Corporatization of Public Hospitals.

Roadmap for the Volume

A roadmap of this volume follows. Part 1 provides a conceptual framework for understanding organizational reforms, their design, implementation challenges, and monitoring and evaluation of impact based on a global review of the literature. Part 2 provides a cross-cutting analysis of empirical data from a global review of selected countries and two regional assessments of marketizing reforms in the hospital sector—Eastern Europe and Latin America. Part 3 presents the results from eight case studies.

Part 1—Conceptual Framework

By reviewing the literature on institutional economics and organizational theory in its application to a wide range of sectors, chapter 1 identifies five areas in the incentive regime of hospitals and three critical factors in the external environment that need to be carefully coordinated during organizational reforms. The cross-country analysis and case studies show that countries encounter problems when parts of the hospital’s incentive regime—such as decision rights, market exposure, residual claimant status, accountability arrangements, and explicit policies and reimbursement of social functions—are unbalanced or “out of sync” with each other.
For example, even with extensive decision rights over areas such as strategic planning, financial management, and procurement, hospital managers will find that efficiency and productivity improvements elude them if they do not also have control over labor. Many countries yielded to the demands of powerful stakeholders and did not transfer control over labor to the reformed hospitals.

But even consistency among the changes in the hospital’s incentive regime under these five categories is often not enough. Success depends equally on underpinning these reforms with broad changes in the external policy environment to ensure the hospital’s payment system and market environment work to promote improvements.

For example, hospital reforms designed to take advantage of efficiency gains prompted by competition will not work if the factor markets (e.g., pharmaceuticals, labor, or custodial services) or product markets (e.g., hospital services) are allowed to manifest monopolistic behavior. Likewise, parallel changes in funding arrangements and the provider payment system are often a particularly critical element of marketizing organizational reforms.

Even with extensive changes in decision rights and accountability arrangements, the behavior of hospital managers is unlikely to change significantly if hospital funding continues to rely on historical patterns with soft budget constraints. And reforms that create hard budget constraints are likely to impair equity unless parallel financing reforms ensure that the subsidies for poor patients are in line with the unit cost of their treatment.

Chapter 2 highlights the importance of the political economy, context, and process dimensions of reforms like the autonomization and corporatization of hospitals. Even a well-designed reform will fail without the political consensus to implement it, or if strong vested stakeholders such as the medical profession or labor unions are not brought on board, or if the political cycle is too short and subsequent governments reverse or dilute the reform policies. Compromises on labor reforms and political interference with decision rights and accountability arrangements were among the most damaging of such compromises observed in many countries that attempted but failed to achieve organizational reforms.
Powerful medical groups that see their incomes or clinical autonomy threatened by the reforms can easily frustrate implementation. Hospital managers that see their informal discretion over the hospital reduced through new accountability mechanisms may equally resist the reforms. Winning support from the medical profession and hospital management was therefore critical to the more successful reforms. Lack of such support contributed to failure.

Similarly, vocal groups in society that have deep-rooted, “anti-market” value systems can poison the reform environment, especially in the case of complex reforms aimed at efficiency gains without easily identifiable “short-term wins.” Even without being elected, opposition parties that seize the opportunity to exploit such negative reactions can pressure policymakers into compromises that weaken the needed coherence and complementarities among the different reform elements.

The context in which reform takes place can sometimes be as important as the design of the reform itself. Many public sector reforms in the late 1980s and early 1990s, including the autonomization and corporatization of hospitals, were motivated by similar problems of poor performance from public institutions during fiscal crises. Yet the context for reforms in the health sector was often very different. The country context also varies greatly. For example, the environment for private sector activities, especially in terms of contracting and regulatory enforcement, directly influences the feasibility of corporatization reforms. Hence, it is particularly important to examine what is already going on in the private sector as an important predictor of what will be the outcome of hospital corporatization reforms.

For example, country “X” might have a high level of informality, corruption, weak contract/company law, a low general “rule of law,” and no organized public purchasing of services (often the case in low-income countries). Country “Y” might have a small informal sector, little corruption, strong contract/company law, a high “rule of law,” organized public purchasing, and other “quasi-public” organizations already in existence. Even if both countries had the same policy objectives and everything else was the same in the rest of their
health systems, the feasible and advisable design for each of them would have to be very different.

The speed of reform and extent of changes are also significant. The “big bang” approach runs the risk of outstripping a country’s implementation capacity. The “incremental approach” runs the risk of going off course over time. For example, if country “Y” had a strong central government, parallel public sector reforms, and significant institutional capacity in the health sector, it might be able to jump directly into hospital corporatization under a big-bang reform. Country “X” most likely could not. The chances of success in country “X” might have been enhanced by a more incremental reform process. This might consist of first passing through a learning phase, using more limited hospital autonomy or piloting a limited number of hospitals. Provider payment reforms could slowly progress from funding based on inputs/historical resource use, to global budgets based on inputs, to partial funding/bonuses based on some performance indicators (benchmarking), to funding tied to outputs, to noncompetitive purchasing of outputs, to competitive/selective purchasing.

Chapter 3 demonstrates just how difficult it is to monitor and evaluate the impact of reforms in a complex, multiproduct organization like a hospital. Surprisingly, none of the case-study countries developed an evaluation strategy in advance. In the United Kingdom, a deliberate attempt was even made to avoid examining performance during the first phase of its introduction for fear that evidence of failure early in the experimentation period might bolster opposition to the reform. In every case, the limited evaluation carried out later lacked a clear baseline and focused only on target hospitals, missing the opportunity for comparison, using nonreformed hospitals as a control.

The limited evaluation that was possible highlighted several important problem areas. First, reform objectives often were not clearly stated, making it difficult afterward to assess successes and failures in achieving the objectives.

Second, the main reform levers—altering the incentive regime of the organization and the external environment—must lead to
changes in the behavior of providers and patients before their net effect shows up in final impact indicators in terms of health outcomes, efficiency, equity, and quality. Changes in the behavior of providers and patients provide proxies for impact.

Third, without explicitly anticipating some of the potentially negative consequences of the reform (such as the financial burden of user fees on the poor) and introducing mitigating policies (such as subsidies or exemptions), the corporatization of public hospitals runs a high risk of being associated with some serious health, efficiency, equity, and quality trade-offs. Many of these negative consequences could be avoided by looking at the impact of the corporatization of hospitals on the overall structure of the health system and making compensating adjustments in its structure.

Finally, many of the desired effects of organizational reforms—such as efficiency gains and improvement in consumer responsiveness—are subtle and, hence, not easily perceived by the public. Little credit will be given for valid efficiency gains in managing hospital resources and activities if the public sees long waiting lists, decreased availability of drugs in dispensaries, and overworked and rude staff. In all the countries examined, too little attention was given to ensuring high-visibility “quick wins” that would increase public confidence in the reform process.

**Part 2—Cross-Cutting Analysis**

Part 2 of the volume includes a cross-cutting analysis of the global experience on organizational reforms and two regional cases studies (Central Europe and the former Soviet republics, and the Southern Cone of Latin America).

Chapter 4 presents a cross-cutting analysis of the design and implementation of the experience of marketizing organizational reforms based on data drawn from the two regional reviews and eight case studies. The first section assesses the hospital reforms according to their effectiveness in achieving stated objectives, how well they stayed on track, and their overall coherence. Against these criteria, the authors find that Singapore, Hong Kong, Malaysia, and Tunisia
were “more successful.” They find the United Kingdom reform “partially successful;” New Zealand and Indonesia are assessed as “less successful.”

The authors then apply the Gill Walt political economy framework to characterize the common elements among each group of reformers. Clear patterns emerge in terms of the success in dealing with implementation challenges. The more successfully implemented reforms dealt more pro-actively with the powerful stakeholders that are usually mobilized by these reforms, including public sector unions and professional associations. Reformers in these countries also dealt more effectively with the significant political demands these complex reforms generated. Finally, the more successful reforms included efforts to address the changed, and increased, demands on hospital management.

Given the dearth of serious monitoring and evaluation associated with marketizing organizational reforms, the authors are tentative in outlining a number of hypotheses explaining the success or lack thereof. Helpfully, they also outline some of the most successful “mitigating strategies” applied to address common problems confronted in implementing these reforms.

Organizational changes in the hospital sector have been a common component of health system reforms throughout Central Europe and the former Soviet republics during the 1990s. Chapter 5 selectively reviews these reforms, focusing notably on the countries where reforms have progressed farthest.

Health systems in Central Europe and the former Soviet republics have been slow at introducing marketizing organizational reforms in the hospital sector. This is puzzling since the theme of moving hospitals at arm’s length from the core public bureaucracy and subjecting them to market pressures is fully congruent with the economic and public sector reforms in transition economies which aim to reduce the role of the state and emphasize individual self-reliance. Instead, decentralization of ownership and output-based payment mechanisms predominated the reform agenda of service delivery in the region. As the authors in chapter 5 discuss, the changes did not “add up.”
The governance arrangements that emerged from hospital devolution themselves were inconsistent and problematic—with local governments struggling to deal with these, and many other, new roles. Some social insurance funds did take tentative steps toward active, output-based funding, but, owing to the weak governance arrangements, found the hospitals generally unresponsive.

The authors conclude that most of these countries will find it necessary to revisit hospital governance in the near future, if desired performance improvements are be achieved.

Hospital organizational reforms were also common in the Southern Cone of South America during the 1990s. Chapter 6 reviews the reform experiences in Argentina, Chile, and Uruguay.

In Argentina, the national government was committed to these reforms, and it attempted to motivate the provinces (as hospital owners) throughout the country to “buy in” to the reform model. The Argentinean model was designed to implement autonomy at the level of the individual hospital. In contrast, Chile opted for a vertically integrated network model in autonomizing its regional health administrations. Uruguay, after failing to introduce a nationwide reform, pushed forward with four pilot hospital autonomization programs.

Although all three countries sought to implement modest autonomization reforms in their hospital sector, they nevertheless intended to create indirect accountability mechanisms that are often associated with substantially greater hospital autonomy. In addition to creating boards in the reformed hospitals, all three countries tried to establish contracts with hospital managers in an attempt to enhance management focus on performance.

This regional case study underscores the implementation challenges that almost always emerge during organizational reforms, especially in countries where labor interests hold significant power. With a few exceptions in some Argentinean provinces, political and institutional problems substantially blocked reforms in all three countries. The relative success in Argentina illustrates the importance of support during implementation at the hospital level where the required organizational changes are significant but where opposition from vested interests is also the greatest.
Part 3—The Case Studies

The United Kingdom introduced several reforms that decentralized and regionalized the hospital sector during the 1970s and 1980s. But it was not until the early 1990s, after a major organizational reform and privatization of public infrastructure and utilities, that the U.K. government decided to apply in earnest a marketizing organizational reform model and to introduce marketlike pressures on the hospital sector (chapter 7). Although the original corporatization model for the health sector was inspired by the managed care movement in California and initially piloted in Sweden, it was its introduction in the United Kingdom that sparked a global fascination with this type of reform.

At the time that the United Kingdom introduced its reforms, hospitals functioned as virtual government departments. The hospitals that the government selected for the first wave of reform were intended to take on a radically different governance structure, including establishment of independent legal status (Trust), greater control over the employment and management of staff, and many other important decision rights that had previously been centrally administered. Newly created hospital boards were to be modeled on commercial boards and to provide oversight of the Trusts’ management and operation without day-to-day government intervention. And new purchasers were to generate performance pressures in their selective purchasing, hence exposing the Trusts to considerable market pressures.

In practice, a number of these elements were left out during implementation, and the real forces for accountability continued to be exercised administratively through the Department of Health and the NHS Management Executive. Paradoxically, instead of increasing hospital autonomy, the reforms ended up increasing the influence of central authorities over the hospital sector. The U.K. reforms, therefore, underscore the distinction between formal governance structures and governance practices. While it is clearly important to put in place organizational arrangements that support desired governance processes, this change is not sufficient in itself. Structures that are de-
veloped to support enhanced autonomy can end up serving as a vehicle for more centralized administration. Beyond this mismatch between governance practices and structures, a broad range of other factors that are discussed in the volume also contributed to the disappointing results associated with the U.K. reforms.

In 1993, New Zealand became the second industrial country to implement a hospital organizational reform modeled on structural reforms originating in the state-owned enterprise sector (chapter 8). Similar to the enterprises that remained state-owned, the reforms were intended to expose hospitals to market pressures while keeping ultimate control in public hands.

As in the case of the United Kingdom, the New Zealand hospitals were converted to legally independent entities (Crown Health Enterprises, CHEs), with associated changes in decision rights and accountability mechanisms. In contrast to the United Kingdom, however, New Zealand’s public hospitals already had substantial day-to-day autonomy from the central government. As in the United Kingdom, in New Zealand the 1993 reforms increased instead of decreasing the hospitals’ reliance on direct accountability mechanisms applied by the central government.

Despite this paradoxical nature of the reform model, and an implementation process that vacillated back and forth in response to political pressures, New Zealand witnessed improvement in some performance indicators (allocative efficiency, transparency about costs, and enhanced equity in access). On the whole, however, the reforms were not viewed as successful. As a result, in 2000, a new government substantially reversed the reforms. This lack of success is largely attributed to fundamental alterations made to the financial regime of the reform model as well as weaknesses in the implementation process.

The 1995 hospital reforms in the state of Victoria in Australia were driven by a desire to increase efficiency and the recognition that this would require substantial rationalization. This reform is presented in chapter 9.

Instead of having a government-driven rationalization plan, the reforms were designed to enable this process to occur in a decentral-
ized manner. Thus, the reforms integrated groups of metropolitan hospitals (and subsidiary providers) into several networks, which could then compete with each other.

As in the case of New Zealand, the hospitals in Victoria were already fairly autonomous. Hence, the reforms did not focus on enhancing autonomy but on introducing more corporate-like operations at the network level. Many of the desired improvements that took place, including rationalization, resulted from the combined influence of the hospital reforms and a diagnostic-related group (DRG), performance-based provider payment system. The driving force behind the rationalization that took place appeared to be the organizational reforms that set up the network hospital structure rather than changes in any individual hospital’s decision rights or other incentives.

In 1991, Hong Kong policymakers believed the biggest problems in their hospitals related to rigidity and lack of management expertise. They designed their reforms to address these issues (chapter 10). New incentives were not a central element of the organizational reform introduced in Hong Kong, perhaps because the government apparatus generally performed well. The Hong Kong reform was not designed to rely on markets or marketlike pressures to enhance performance. Instead, policymakers created a single new corporatized Hospital Authority that was granted significant autonomy and enhanced administrative accountability arrangements.

The reform integrated all public and publicly funded hospitals, constituting almost 90 percent of beds, into this newly created autonomous legal entity. The Hospital Authority was encouraged to undertake managerial and structural changes that would make it function like a corporation. The reforms gave the Hospital Authority a great deal of day-to-day freedom, relying on annual performance targets for accountability.

The Hong Kong reform was relatively successful on a number of fronts, but of mixed success in improving quality. Consumer responsiveness and queues in particular remain issues. Accountability relied almost entirely on the effectiveness of the performance measurement system, since there was no other source of performance pressure such as output-related payment, hierarchical control, or consumer
choice. Evidence to date shows that this system, though improving, still falls short in making the Hospital Authority truly accountable for performance. As yet there appears to be no penalty for failing to meet performance targets.

In 1992, Malaysia reformed its newly built National Heart Institute using a corporatization model that had been applied to other state-owned enterprises in that country (chapter 11). As in many other countries, difficulties arose during implementation, when the original design of the reform was scaled back in a number of areas. The resulting model had some elements that were more reminiscent of enhanced hospital autonomy than the more complete corporatization originally envisaged. But, since the reimbursement system was not designed to fund specific services or services for targeted individuals, the reform went as far as it could, given this constraint, toward the establishment of marketlike incentives and performance pressures.

Not surprisingly, as a result of the funding system, the Heart Institute did shift toward providing more services to private patients who could pay for their treatment. To make up for these structural problems, the Malaysian authorities made some provisions to deal with the resulting negative impact on equity. These provisions included: funding coverage for a portion of needy patients, ensuring that other hospitals continued to provide cardiac services to the poor, and mobilization of additional funding to cover losses associated with services to the poor.

Initiated in 1985, the Singapore hospital reforms were the first to combine autonomy with reliance on market-based performance pressures (chapter 12). As in Australia, the Singaporean reform was implemented in a group of hospitals or “network,” rather than in individual hospitals. Unlike in Australia, however, the model did not envision competition among public entities, since the group of hospitals integrated into the network constituted most of the public hospital system.

Singapore’s experience is instructive in illustrating the strong reliance of marketizing organizational reforms on a complementary financing system to create the needed incentives for productivity as well as accountability. In addition to its hospital reform, Singapore
simultaneously undertook far-reaching reforms in its system for financing health care. This resulted in Singapore’s unique system of Medical Savings Accounts that allows individuals to generate performance pressures on participating hospitals through consumer choice, while retaining protection against financial risk and constraints on overall expenditure.

In the early 1990s, Tunisia undertook a multifaceted hospital reform of its 22 teaching hospitals (chapter 13). The reform is viewed largely as a success in the country and has proven to be sustainable. The Tunisian program is notable for pursuing changes on the technical, managerial, and organizational fronts simultaneously. The organizational changes were, however, relatively modest, with the endpoint arrangements falling closer to a budgetary entity than an autonomous entity.

As observed in some of the other case studies, the reform paradoxically increased the administrative influence of central authorities over hospitals. The Tunisian reform, therefore, once again underscored the distinction between formal governance structures and actual governance practices. While it is clearly important to put in place organizational arrangements that support desired governance processes—it is not sufficient. In Tunisia, as in the United Kingdom, structures developed to support enhanced autonomy, ended up serving as a vehicle for centralization.

Marketing organizational reform of hospitals is a complex and challenging means of addressing problems in the sector. Consequently, it is rarely done unless there is a strong driving force. Serious fiscal problems are one of the most common motivating factors. The hospital reforms in Indonesia were clearly driven by the fiscal crises of the late 1980s and early 1990s, and the resulting desire to reallocate budgetary expenditure from hospitals to facilities delivering ambulatory care (chapter 14).

The government opted for a version of autonomization applied to individual hospitals rather than a full-blown corporatization model. Given the focus on reducing expenditure, it is somewhat surprising that the Indonesian reforms did not directly deal with labor management. This constrained the eventual efficiency gains that were
possible through the reform. Instead, reformed hospitals were encouraged to earn more private revenue in an attempt to decrease the needed budgetary support. While there were indications of improvements in both efficiency and quality, provisions to protect the poor against fees and cost increases were weak and often not implemented. In the final analysis, the reforms did not enable the government to decrease its hospital funding, and are therefore not viewed as a success.

Building on previous efforts, the government that took office in August 1998 in Ecuador began to attack the most critical bottlenecks in the Ecuador health care system (chapter 15). First, constitutional changes opened a window of opportunity for pushing forward a modest reform agenda. This included: (a) a strengthening in the policymaking and regulatory role of the central Ministry of Health; (b) deconcentration or delegation of administrative and financial function to peripheral branches of the public bureaucracy; and (c) decentralization of a range of political, economic, administrative, and financial functions.

Although not all the reforms envisaged were implemented because of further changes in the government in January 2000, several changes in the incentive regime of the hospital system are now well under way. These include: (a) changes in the organizational and governance structure of public hospitals; (b) greater decision rights by hospital managers over planning, financial management, cost recovery policies, financing capital investments (civil works, equipment maintenance), and some aspects of human resources management (training, performance incentives, and career development); (c) introduction/increase in some user fees; and (d) safeguards to protect poor households from the negative impact of user fees such as discounts and exemptions. Finally, participating hospitals now use “shadow prices” to gradually acquaint managers with an output-based financing system.

It is too early to know the full impact of these reforms on the performance of the Ecuador hospital sector. As in other countries around the world, success will depend as much on the politics of implementation as it will on the technical soundness of the design.
A Few Noteworthy Themes in Conclusion

In conclusion, two major lessons learned are worth highlighting from the topical chapters, regional reviews, and case studies:

- If reforms are too complex to fully design ex ante, go with the broad-brush or blueprint and be prepared to adapt as you go along—while maintaining overall policy coherence.

- Organizational and marketizing reforms are systemic in nature—they cannot be introduced in the hospital sector alone without parallel reforms in other parts of the health system.

The Broad-Brush Approach

As would be expected, the case studies demonstrated that trial-and-error experimentation has marked the early generation of marketizing organizational reforms of hospitals. There are both striking successes and dismal failures. Policymakers poorly understood many of the lessons learned through similar reforms in sectors such as transport, infrastructure, and telecommunication; other lessons did not directly apply to the health sector.

For example, much has been learned about the need for special techniques like performance benchmarking and long-term contracts when public firms are transformed into entities that end up with a natural monopoly. This is especially true in the highly specialized hospital sector and in rural areas, where overheated competition among overlapping units may be undesirable since it can lead to a wasteful duplication of capacity and an expensive “medical arms race” for the latest technology.

Yet lessons from other sectors in this regard do not apply directly to a multiproduct organization such as the hospital, where output and health-outcome performance indicators are much more difficult to define and monitor than, for example, kilowatt consumption in the energy sector. Much more refined instruments are needed to guide the behavior of substantially independent hospitals, such as case-mix adjusted payments that are data-intensive and require so-
phisticated patient records and accounting systems. Much new learning has, therefore, had to take place as the principles of marketizing organizational reforms were applied to the health sector.

**Parallel Reforms**

This volume also shows that the organizational reform of hospitals is a multidimensional reform that requires coherent changes in a number of critical factors, not just appointing a management board or placing the hospital within the remit of company law. Reforms introduced in isolation in the hospital sector almost always engendered an incoherent policy framework and had many adverse effects on other parts of the health sector.

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Part 1

Overview of Marketizing Organizational Reforms
CHAPTER 1

A Conceptual Framework for the Organizational Reforms of Hospitals

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Throughout the world, governments are reassessing their role in health service delivery. They are being forced to do so by growing pressures, including cost escalation and increasing user dissatisfaction with services. In public hospital systems, the problems are typical problems associated with publicly run services: inefficiency, both technical and allocative; low productivity; unresponsiveness to users (patients); waste; and, sometimes, fraud and corruption. Excessive influence or even domination of health services by provider organization and health workers is often recognized as an important part of the problem.

With increasing frequency, autonomization and corporatization are being considered and applied to improve performance of publicly run health services, similar to recent innovations in organizational reform elsewhere in the public sector.

So far, however, little of this recent experience has been pulled together in a way that is readily accessible to policymakers and sector experts. This volume attempts to do so. To support this review, we outline the relevant theoretical literature and experiences with organizational reforms both within and outside the health sector. We hope this volume will help practitioners understand:
What the reforms consist of
Which problems they attempt to address
Why they are structured the way they are
Why their designers think they will resolve certain problems
What lessons can be gleaned from these experiences.

We use the term *organizational* to distinguish reforms that alter the structure of hospitals and their relations with other parts of the system from reforms that try to improve hospital performance within the existing parameters of the system (box 1.1). There are three types of organizational reforms that share a common element of “marketization.” These are *autonomization*, *corporatization*, and *privatization*. All three involve reducing direct government control over the hospitals in question and exposing them more to the market or marketlike incentives.¹ This volume covers only autonomization and corporatization, which apply these marketlike incentives while maintaining public ownership. Privatization will be reviewed in a separate volume.

**The Need for Reform of Health Services**

During the past 50 years, many low- and middle-income countries have established publicly funded health care systems, with services produced by a vertically integrated bureaucracy in the public sector. These systems were structured this way primarily as a response to market failures and inspired by Western systems such as the New Zealand and British National Health Services.

Often with the help of donors, health sector policies focused on expanding the underlying human resources and physical infrastructure (clinics, diagnostic facilities, laboratories, and hospitals). Systems were developed to supply drugs and medical equipment and to train staff. Worldwide, the number of hospital beds rose between 1960 and 1990 from 5 million to 17 million, more than doubling.
Box 1.1 Definitions: The Players, the Rules, and the Objects of the Game

The key distinctions between organizations, institutions, and interventions parallel those between the players, the rules, and the objects of a game. Organizations are the players—the way the people are structured or organized (e.g., hospitals, clinics, pharmacies, and public health programs). Institutions are the rules (formal and informal customs) of the game or activities—the humanly devised and socially shared constraints that shape human interaction and the mechanisms by which these rules are enforced. Interventions are the objects of the game or activities (e.g., clinical interventions, public health interventions, and intersectoral action).

In common usage, the terms organization and institution are often used interchangeably. Physical facilities such as hospitals and insurance agencies are often called institutions, and management capacity is often referred to as institutional capacity. For example, management training, information systems, and changes in human resources policy are often described as ways to strengthen institutional capacity, even though none of these measures addresses the underlying problems in rules and informal customs (the institutional problems) that may be at the root of dysfunctional behavior of service providers. To avoid misunderstanding, this volume refers to rules, rather than using the term institution.

Governance is the relationship between the organization and its owner(s). Ownership (public or private) provides the right to make decisions on the use of an asset and the right to the income that remains after all fixed obligations are met.

supply per head. Parallel to this development, the number of doctors increased more than fivefold, from 1.2 million to 6.2 million.²

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. Despite these impressive accomplishments, however, increasingly serious problems are apparent in publicly operated health services. Many of these problems originate in the delivery system, and many of them have parallels in infrastructure and other segments of the public sector.

Publicly delivered health services, like other public services, are plagued by critical problems, among them technical inefficiency. Resources within facilities are used poorly, often very poorly.³ At the systemic level, allocative efficiency is a severe problem—with resources often flowing disproportionately to urban, curative, and hospital-based care.⁴ The public sector is often lax in tracking the cost of services. In the health sector, such inattention to costs reduces the ability to identify and deliver cost-effective services.

Although equity is a key rationale for public delivery, distribution of resources in public systems is rarely targeted toward the people who need them most.⁵ Social services delivered by public providers are notoriously unresponsive and unaccountable to users. Stories abound of poor staff treatment of patients in government health facilities. Quality is often questionable—both clinical and consumer quality. Equipment is often faulty or broken.

Changing Views on the Role of the State

“The world is changing, and with it our ideas about the state’s role in economic and social development.”⁶ Reforms in the organization of health service delivery are indicative of fundamental changes in views about the appropriate role of the state in the economy. Many factors have contributed to a better understanding of the shortcomings of an overextended state role in the economy: the collapse of centrally
planned economies; the fiscal crises in welfare states of the advanced industrial economies; and the Asian crisis—calling into question the “miracle” of sustainable state-led growth of the East Asian “tigers.”

In developing countries, overextended governments try to do too much with too few resources and little capability. Concurrently, they often fail to ensure provision of the most fundamental social goods such as basic health and education, property rights, and roads. The growing consensus is that the path to greater state effectiveness and rapid development lies in matching the government’s role to its capabilities, while making better use of the private sector in areas where the state has no comparative advantage.7

Government divestiture of commercial activities has yielded the first and easiest gains on the road to focused and effective government. Cement production, for instance, is an activity in which state production has not been found to provide any advantage over the private sector. The widespread success of this “first wave” of organizational reforms showed how much a society could gain just by getting government out of the business of producing commercially viable goods and services. Although many governments still hold back their countries’ growth through involvement in producing commercial goods, no serious evidence or analysis supports this policy.

Building on successful transformation of commercial companies, governments throughout the world have begun to apply these reforms to their public utility services in a “second wave” of reform. Redefining the state’s role in delivering infrastructure services has been a more difficult path to navigate. Although the state definitely has some role to play here, prevailing wisdom on what that role is has changed.

In these sectors, the long-held view was that because of a “natural monopoly,” these services had to stay in public hands—to capture scale economies and curtail exploitation of monopoly power. Technological change and institutional innovation have made it possible to diversify production and service-delivery arrangements. This has led to huge improvements in efficiency, quality, and responsiveness of services, not to mention lightening fiscal burdens previously associated with operating these services as public sector monopolies.8
These experiences in privatizing or commercializing (usually through corporatization) the organization of infrastructure services outside the social sectors have revealed the previously large hidden costs of public sector monopolies in these areas of the economy. At this point, few will argue in favor of government operation of infrastructure services or other commercially viable areas of the economy.

Now a “third wave” of reforms is in evidence as many countries experiment with applying marketizing reforms to social services (health, education, and pensions). In the health sector, policymakers are struggling to apply and amend these reforms to address the many problems in publicly delivered health services, while pursuing social protection and equity. In addition to being influenced by reforms outside the sector, they are also supported by developments on the analytical front.

Theoretical advances of many types—from neoclassical economics to the economics of organizations—have contributed to the new perspectives on the organization of service delivery.

**Neoclassical Economics**

The neoclassical paradigm lays out the potential sources of market failure. The rationale for public ownership has been its effectiveness as a tool for pursuing social objectives in the presence of market failures. This belief is based on a simple view of the relation between ownership and control. Privately owned companies are generally conceived of as profit maximizers—since by maximizing profits they maximize benefits to their shareholders (or owners). Sometimes maximizing shareholder benefits is not seen as maximizing benefits to society as a whole.

Broadly speaking, shareholders’ and society’s interests can clash when competitive solutions do not exist (natural monopoly) or when they exist but are not efficient (because of externalities, the nature of public goods, or asymmetry in the information available to each party). In health, this reasoning supports public intervention to address market failures with regard to both equity and efficiency. Based on these insights, public ownership has been used as a tool to get the
organization to replace the narrow interests of owners with the wider interests embodied in the state, to pursue social goals as assiduously as private benefit.

**Economics of Organizations**

Although neoclassical economics delineates potential sources of market failure, the theory is silent on the critical issues of structuring institutional solutions. The mechanism by which public ownership is supposed to maximize social goals is nowhere precisely defined. Neoclassical economics is essentially “institution free.” Recently, this vacuum has been filled by new analytical tools for understanding the impact of different ownership and governance arrangements.

Much progress has been made in identifying the key factors causing wide variations in organizational performance. The most relevant developments for organizational reform in health come from principal-agent theory, transaction cost economics, and property rights and public choice theory. These fields are often grouped together under the title “economics of organizations”—and all deal with considerations of information, motivation, innovation, and the implications for how productive activity can best be organized.

The traditional rationale for public ownership was based on a simplistic model of individual behavior—presupposing that the objectives of the government and of the managers of public organizations were identical. Policymakers assumed that managers told to pursue the public interest would be able to determine what that meant and would have the incentives to do it.

In practice, the vagueness of the objectives and the difficulty of precisely determining and monitoring output has proved “inimical to the efficient management of the [sectors] concerned.” Public ownership removed the opportunistic profit maximizer—but civil servants or politicians have turned out to be no “high custodian of public interest.” Instead, they have often pursued their own private benefits. The economics of organization has shed light on the issue of how best to structure organizations, assuming that individuals, at least in part, are pursuing their own self-interest. This analysis added
to the general understanding of the sources of the problems that occur with incentives in publicly run services.

**Agency Theory**

Agency theory highlights the need to reconcile divergent interests among individuals under conditions of widespread uncertainty and uneven access to information. The key relationship, as modeled, occurs between a principal and an agent. The principal needs the efforts and expertise of the agent but has only limited ability to monitor the agent’s actions or evaluate whether the final outcome is satisfactory.

The agency literature surveys the range of contracts such as payment and monitoring arrangements observed in the economy as attempts to align incentives and to reward cooperation between self-interested but interdependent individuals.\(^{14}\) The need to align incentives pervades the health sector: the relationship between patient and physician is a classic case of the principal-agent structure. Physicians and hospital managers also have divergent interests and different competencies, yet they need one another. Most important for our review is the principal-agent relationship between the government owner and hospital management.

Governments, like firms, must design evaluation and reward mechanisms to obtain high-quality performance regardless of whether they contract with employees or with outside providers/suppliers. Several studies have generalized the agency insight from the employment context to the full range of relationships that make up the firm—now conceptualized as a nexus of many contracts.\(^{15}\) This conceptualization has increased the understanding of ownership and governance by clarifying the relationship between the firm’s managers and suppliers of capital, equity shareholders as well as bond debt holders. By illuminating critical elements of relations between owners and firms, this analysis has also improved understanding of the governance relations between governments and public service providers.

The rise and predominance of the modern corporation is attributed to its successful governance structure. This structure allows
professional managers to be assigned decision rights and performance incentives, although they bear little financial risk. Risk is borne by diversified investors, who need not assume control.

This analytical framework helped identify and explain some of the performance differences of organizations with different governance structures. These insights, about what governance mechanisms work in which situations, have enabled governance improvements, both in public and private organizations. Progress was made in particular in understanding the impact of monitoring and accountability mechanisms on incentives.

Transaction Cost Economics

Transaction cost economics (TCE) has focused attention on the distinctive features of activities organized within an organization, versus those organized through market interactions.

TCE looks at questions such as: Why does a company buy some inputs, rather than producing them in-house? Why does the director of a department decide to hire someone to undertake certain tasks, rather than buying the services from a company or individual? In answering these questions, TCE scholars have identified the general advantages of internal organization. They have found that internal organization is used when the exchange or activity is simply too complicated to contract for. Because of the cognitive limits of economic agents, their willingness to pursue self-interest, and the unforeseeable changes in the environment, every contract, even the most detailed, is inherently incomplete. None can fully anticipate and accommodate the differing interests of the negotiating parties. For certain types of activities, contracts won’t be sufficient, rather the interaction needs to be supported by organizational means. Integrating activities inside a single organization enables better responses to unforeseen events and adjudication of the problems they create. TCE analysis sheds the most light on firm boundaries and the conditions under which activities are best arranged within a hierarchy instead of through interactions in a market with suppliers or other contractors.
As noted above, vertically integrated organizations arise when activities can’t be organized through market contracting. Vertical integration permits the details of future relations between suppliers (including employees), producers, and distributors to remain unspecified. Differences can be adjudicated as events unfold. Vertical integration (or unified ownership) pools the risks and rewards of the organization’s activities and can facilitate information sharing, the pursuit of innovation, and a culture of cooperation.

Despite these positive features, vertical integration suffers from characteristic weaknesses as a mechanism of governance. Notably, it substitutes low-powered incentives, like salaried employment, for the markets’ high-powered incentives of profit and loss—thus reducing dramatically incentives for productivity. Incentives weaken as people capture less and less of the gains of their own efforts when rewards and losses are spread throughout the organization. Another often-observed problem with vertical integration is the proliferation of influence activities (box 1.2). Despite its focus on the contracting problems that motivate internal organization, transaction cost economics views vertical integration as the governance mechanism of last resort. In most contexts, contracts, contractual networks, virtual integration, franchising, or establishing concessions are observed to outperform unified ownership arrangements.

Governance arrangements are evaluated by comparing the patterns of costs generated for planning, adapting, and monitoring production and exchange. Unlike public organizations, private firms have the flexibility (indeed the requirement) to adjust their governance structure to changes in the market environment—making them good targets for identifying “better practices” for governance arrangements.

The TCE insights about the problems with internal organization have been particularly influential in analysis of public sector operation. Performance problems within large firms are similar in many ways to those seen in the public sector. Recent public sector reforms have been strongly influenced by the TCE literature. The emphasis in the 1980s in many OECD countries on contracting out services, for example, was motivated at least in part by the better understand-
Box 1.2 Influence Activities

An important issue related to moral hazard and the structure of organizations is influence activities and the associated costs, known as influence costs.\(^a\) Recent analysis has shed much light on the propensity of publicly owned service delivery organizations to capture inordinate portions of the sector budget, as well as on their ability to influence sector policy to their benefit—often at the expense of public interest.

In the health sector, provider organizations expend effort to affect decisions regarding the distribution of resources or other benefits among providers to their advantage. These influence activities occur in all organizations, but countervailing forces are particularly weak in public service delivery systems—and influence costs are one of the most significant costs of centralized control. Evidence of such influence activities is seen in public utilities where monopolies are often maintained to protect low-productivity, state-owned enterprises from competition from more efficient producers. In the health sector, the tendency to allocate resources to tertiary and curative care at the expense of primary, preventative, and public health is likewise attributed to “capture.”

The costs of these activities include both the losses associated with poor resource allocation decisions and the loss associated with efforts to capture the rents. These costs can be reduced when no decisionmaker has the authority to make decisions that service providers can easily influence. This condition can sometimes be brought about by creating legal or other boundaries between the policymaker, the funder, and the service provider unit. Many organizational reforms have attempted to diminish these activities. Examples include privatization of utilities as well as reforms separating the policymaker from the payer and from the provider in public service delivery.

\(^a\) Milgrom and Roberts, “Bargaining Costs, Influence Costs, and the Organization of Economic Activity.”
ing of the incentive problems associated with operating these services in-house. TCE analysis has also shed light on the structural roots of the problems with internally organized (publicly operated) health services, laying the groundwork for the recent wave of organizational reforms in the health sector.

**Property Rights Theory**

Property rights theory looks at the same incentive issues from a slightly different perspective. Since private ownership appears to have strong positive incentives for efficiency, property rights theorists have attempted to find out why. Explanations have focused on two issues: the possession of residual decision rights and the allocation of residual returns.17

*Residual rights* of control are the rights to make any decisions regarding an asset’s use that are not explicitly contracted by law or assigned to another by contract. An asset owner usually holds these rights—although the owner or the law may allocate many rights to others.18 The notion of ownership as residual control is relatively clear for a simple asset like a car. It becomes more complicated when applied to an organization such as a firm. Large organizations bundle together many assets, leading frequently to ambiguous decision rights. For example, do a firm’s directors have the right to accept a takeover offer without soliciting competing bids?

In addition to residual decision rights, an owner holds the rights to *residual revenues* from assets. That means the owner has the right to whatever revenue remains after all funds have been collected and all debts, expenses, and other contractual obligations have been paid. Just as the allocation of residual control can be vague and ambiguous in the case of firms (because rights of control over different kinds of decisions may be poorly specified or may lie with various parties), so can the notion of residual returns be unclear.

One problem is that recipients of residual returns may vary with the circumstances (box 1.3). A firm that cannot pay its debts may have to pay lenders an increasing share of its earnings. The lenders become residual claimant. Firms may pay bonuses, increase workers’
Box 1.3 High-Powered Ownership Incentives

Suppose a transaction involves several people supplying labor, materials, and other physical inputs. If all but one person have contracted to receive fixed amounts, there is only one residual claimant. In that case, maximizing the value received by the residual claimant is the same as maximizing the total value received by all parties. If the residual claimant also has residual control, just by pursuing his own interests and maximizing his own returns the claimant will be led to make efficient decisions. The combination of residual control and residual claims provides strong incentives and capacity for an owner to maintain and increase an asset’s value. Firms often attempt to reproduce these high-powered incentives by allocating residual claims in the form of bonuses or shares to key decisionmakers in their firm.a

Misalignment of residual rights and returns causes serious problems. The residual claimant to the returns from state-owned enterprises is the public purse, but the residual decisionmakers are the enterprise manager, the workers, and the bureaucrats in the supervising ministry. None of these has any great personal stake in the value of the enterprise. The resulting low productivity is well documented. Another example of misalignment comes from the U.S. savings and loan (S&L) industry. The individuals who had the right to control the S&L’s investment also had the right to keep a portion of any profits earned but were not obligated to make good on losses. That combination of rights and obligations created an incentive for risk taking and fraud that was not effectively countered by other devices during most of the 1980s.b

These fields of analysis have improved understanding of the institutional sources of government failure. The framework has been used to design organizational reforms that
pay, and promote more workers into higher ranking, higher paying jobs when performance is up. Thus, some of the workers share in the firm’s residual returns. The pairing of residual returns and residual control creates most of the powerful incentive effects of ownership. These effects are very powerful because decisionmakers bear the full financial impact of their choices.

**Political Choice Theory**

Political choice theory has strongly influenced organizational reforms. A central tenet of public choice is that all human behavior is dominated by self-interest. Individuals are viewed as rational utility maximizers. Public choice theorists apply this model to understand how individuals will react to a range of institutional settings and their intrinsic incentive structures. They also study collective action problems, problems that arise when the pursuit of individual interests produces suboptimal outcomes for the collectivity.

This field focuses on the self-interested behavior of politicians, interest groups, and bureaucrats and studies the implications for effective government and the scope of government. Bureaucrats, attempting to maximize their budgets, will acquire an increasing share of national income. As a result, the state will grow well beyond the size needed to deliver core functions. Much has been learned from this work about how powerful interest groups are able to capture re-

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**Box 1.3 (continued)**

seek to allocate to the holders of critical information the authority to make relevant decisions and the financial incentive to do so (in the form of residual claims on the outcome of the decision).

b. Ibid., p. 292.
sources. This analysis has also shed light on the nature of institutional rigidities that reduce economic growth. Because of the focus of this work on opportunism and public administration, many public choice theorists support a conservative political agenda (minimizing the role of the state). However, this field has also generated insights on ways of structuring governance and administration in organizations to minimize opportunities for this destructive behavior. These insights on incentives, contracting, and governance have influenced recent reforms in health service delivery.

Options for Reforming Health Care Delivery Systems

Marketizing organizational reforms such as autonomization and corporatization are usually initiated to address problems that publicly run health services have with efficiency, productivity, quality, and client responsiveness. However, these reforms are not the only methods used to solve them. Management or technological reforms as well as reforms in funding or payment arrangements are also commonly used.

Technological Reforms

Perhaps the most common reforms undertaken to improve hospital performance are focused on enhancing the technological capacity of the hospitals. The prevalence of broken medical equipment and primitive or nonexistent management information systems (MIS) makes this an obvious place to start an effort to improve the operation of public hospitals. The common public sector tendency to allow wages to crowd out capital costs makes such problems endemic. Reforms usually consist of targeted investment in medical equipment, or the computers, databases, and software needed to operate an effective MIS. The skills required to operate the equipment or systems are often lacking. Therefore, technological reforms often include a capacity development component, supporting training for relevant staff.
These reforms have been very important in improving public hospitals in both developing and industrial countries. The rapid changes in medical equipment and information systems technology make these initiatives necessary. However, in many cases, these “technological solutions” have not achieved the desired impact. Follow-up visits to the hospitals find that much of the equipment is not properly maintained, and often not in operation. New MIS systems may be generating valuable information, but often neither clinicians nor managers are using it. In most cases, it is evident that these investments need to be accompanied by additional attention to incentives.

Management Reforms

Many attempts to address problems in publicly run health care delivery systems have been made through management reforms. These reforms have included efforts to strengthen the managerial expertise of health sector managers—both through staff training and through changes in recruitment policies to attract managerial skills. Commonly, these efforts are accompanied by improvements to information systems to facilitate effective decisionmaking. Clinical directorates have been created in some systems, and benchmarking of departmental performance has been introduced.

Many of these efforts are part of the growing trend toward applying “best-practice” management techniques from private companies to reform public hospitals. Frequently, attempts are made to introduce business-process reengineering, patient-focused care, or quality-improvement techniques. However, implementation of these new management practices has been inhibited by the public sector context in which public provider organizations operate.

Private organizations have introduced recruitment and compensation policies, based on the best personnel management techniques for finding and motivating high performers. Civil service constraints have blocked or undermined attempts to apply these methods to public hospital systems. A critical barrier to applying best-practice principles from the private sector is the broad lack of control that public sector managers have over factors of production, especially
labor. Thus, although methods for reinvigorating private organizations have sometimes been successfully transferred to public hospitals and systems, more often than not, the common constraints generated by public sector control structures have frustrated these attempts.\textsuperscript{25} Indeed, attempts to apply private sector management principles to public delivery of health services have added momentum to the organizational reforms discussed below.

\textbf{Funding and Payment Reforms}

Reform of public hospitals’ funding and payment arrangements is another common approach to solving problems of productivity, efficiency, and responsiveness. These payment reforms usually alter the structure of payments to tighten the link between resource allocation and delivery of specific outputs. Retrospective fee-for-service, per diem, or case-based payments are examples of such changes. Some reforms try to encourage efficiency by shifting expenditure risk onto providers via capitated payments or prospective global budgets.

Different structural changes are made in funding and payment systems to address concerns about clinical or consumer quality or responsiveness to users. These payment reforms usually tighten the link between resource allocation and user or payer selection. Examples include limited or fully competitive contracting with providers, fund holding with patient selection, and demand subsidies (health vouchers to be used with providers or insurers).

None of these instruments is perfect. Each helps to achieve one goal at the expense of others. Systems that improve productivity encourage supplier-induced demand. Systems that better contain costs usually encourage shirking and low productivity. The incentives created under each payment structure can be powerful and often create some degree of overshoot that must be addressed. Most systems are not fully understood, nor are measures to compensate for overshoot or known disadvantages. This often requires a mix of multiple payment structures so that the positive incentives of one element of the payment counterbalance the negative features of another. An example is the frequent combination of capitation elements with fee-for-service in areas where productivity is especially important.
For payment system reforms to achieve their objectives, evidence strongly suggests that other reforms must also take place to encourage or enable providers to respond to the new incentives. As discussed below, organizational reforms are complements to payment reforms, not substitutes. Neither works on its own. A similar conclusion applies to management reforms. Although management and funding reforms may be sorely needed to improve the performance of health care delivery systems, by themselves their results have been limited. They did not hit the roots of the problem: poor incentives inherent in the organization of public health service delivery. This realization has prompted the reforms reviewed in the remainder of this volume.

The Nature of Marketizing Organizational Reforms

The growing awareness of the structural nature of public service delivery problems has led policymakers in some countries to make organizational reform a core component of health sector reform. These changes are designed to improve the incentive environment by altering the distribution of decision-making control, revenue rights—and hence risk—among participants in the health sector.

Organizational reforms come in many different forms. Some focus on changing the mapping of functions across agencies, for instance, creating health insurance agencies that collect premiums and purchase health services. Others focus on endowing providers with fund-holding or purchasing authority, thus integrating funding with service provision. Decentralization is another common organizational reform in the health sector, a reform that shifts decision-making control, and often revenue rights and responsibilities, from central to lower level government agencies.

In this volume, we focus our attention on marketizing organizational reforms, that is, organizational reforms that shift decision-making control to provider organizations and attempt to expose them to market or marketlike pressures to improve performance. These reforms also attempt to create new incentives and accountability mech-
anisms to encourage management to use its autonomy to improve the facility’s performance. These reforms may be categorized under three headings: autonomization, corporatization, and privatization.\textsuperscript{26}

Regarding terminology, unlike other sectors such as infrastructure, all health reform modalities include continued funding, contracting, or purchasing by the government. Therefore, the three reform modalities reviewed are often grouped together as separation of provider-payer reforms. In some cases, reform on the funding side of moving from budgeting to contracting is emphasized—hence the title contracting reforms may be used. Quasi-markets, internal markets, and regulated competition are other terms used to describe these reforms within the public sector.

Traditional public hospitals and clinics operate as part of the integrated government structure, usually as a form of budgetary organization (government department). The reforms applied to such organizations vary in magnitude, depending on how far from public toward private the organization is moved (box 1.4).

The structure of health sector reforms being discussed and implemented is strongly influenced by new public management, a set of principles for structuring public sector activities that has gained great currency in the industrial world, especially in the anglophone countries.\textsuperscript{27} These reforms are also influenced by similar reforms in government-run infrastructure companies and other public enterprises.

**Determinants of Hospital Behavior**

**Organizational Structure Determines Hospital Behavior**

The model developed here encompasses the key structural elements of these marketizing organizational reforms. There are clearly other important structural features of hospital systems; however, this model captures the components that these reforms have most frequently been aiming to change (figure 1.1). While this model does overemphasize certain features of hospital governance and management, it enables us to disentangle the components of the reforms and to connect them to provider incentives, as well as to identify critical
Box 1.4 Incentive Environments from Public to Private

One way to illustrate the differences between reform modalities (autonomization, corporatization, privatization) is to view the possible options for structuring service delivery as a spectrum of incentive environments within which the tasks of government can be performed. The civil or core public service lies at the center (usually constitutional control bodies, line ministries), where the activities of the staff are highly determined. Job tenure is strong.

The broader public sector is distinguished by the relative flexibility of its financial management regime and by the greater freedom allowed managers in recruitment and promotion. This may include special purpose agencies, autonomous agencies, and, on the outer limits, state-owned enterprises. Beyond the public sector lies the domain of the market and civil society. Services may be delivered by for-profit, nonprofit, or community organizations. The incentives for efficient production are higher moving outward, where service delivery is often better than at the core.
interconnections. The reform modalities (autonomization, corporatization) are then characterized according to these elements.

The literature reveals that three systemic features have typically been targeted in these reforms. These factors have been selected because of their strong and direct influence on the incentive regime, and hence behavior, of publicly run health service providers:

- **Governance**: the relationship between an owner(s), in our cases, government or government agencies, and the organization (health care providers)
- **Market environment**: the level and nature of competitive pressures in the multiple markets within which the providers operate, including the full range of input and output markets

Many reforms throughout the world have sought to move service delivery away from the center of the circle to more arm’s-length contracts with public and private organizations. However, there are constraints on moving delivery outward related to the nature of the outputs and the existence of mechanisms for public sector management of their delivery. Increased autonomy—moving from the center of the circle to the outer limits—requires accountability mechanisms not tied to direct control. Controls such as contracts take considerable capacity to write and enforce, especially for health services, where outputs and outcomes are difficult to specify.

How far countries may go in pushing activities to incentive environments in the outer circles depends on the nature of the outputs (services) and the capacity to create accountability for public objectives through indirect mechanisms such as regulation and contracting.

Funding arrangements: the structure of the flows from the funder/payer to the provider, including the degree of formality, specificity, and so forth, regarding the related responsibilities or deliverables.

There is no doubt that these three factors exert a powerful influence on the behavior of hospitals as well as the management and staff within them. However, because of their complexity and connectedness, it is often hard to tease apart the different sources of influence. Within our framework, the impact of changes in the governance and funding arrangements and the market environment is determined through the combined influence on five critical determinants of the incentives that the hospital faces. We refer to these elements as the hospital organizational structure:

- Allocation of decision rights
- Distribution of residual claims
- Degree of market exposure
• Structure of accountability mechanisms

• Provisions for social functions.

These elements are further elaborated below.

Decision rights. All the reforms discussed in this volume attempted to influence hospital and managerial behavior by expanding their autonomy, or rights to make decisions. Thus, each reform can be characterized by the magnitude of control shifted from the hierarchy, or supervising agency, to the hospital. Critical decision rights transferred to management may include control over inputs, labor, scope of activities, financial management, clinical management and nonclinical administration, strategic management (formulation of institutional objectives), market strategy, sales, and the production process.

Residual claims. The additional autonomy given to the hospitals and managers doesn’t directly motivate them to use their added discretion productively. In the reforms discussed below, additional decision-making control was usually complemented by giving managers and staff a material interest in resources. This interest was generated by allowing “leftover” resources to remain in the hospital, rather than turned over to the treasury or local government. As James Q. Wilson, a famous scholar of public sector management once asked, “Why scrimp and save if you cannot keep the results of your frugality?” Therefore, a distinctive feature of the reforms is the degree to which the public purse ceases to be the residual claimant on revenue flows. The wisdom of linking these two factors is underscored by property rights theory, which emphasizes the importance of aligning revenue flows and decision rights appropriately to bring about the right decisions.

Market exposure. What distinguishes autonomization and corporatization from other organizational reforms, such as decentralization, is their reliance to some degree on market or marketlike incentives.
That is, all these reforms moved hospitals toward at least some reliance on earning revenue under market conditions instead of relying only on budget allocation. Again, as we’ll see, the means for doing so varied, but usually the reforms increased the importance of patient or other payer revenue based on choice. After the reforms, it was intended, if not actualized, that hospitals would have to work harder to deliver services that either patients, insurers, or other payers would choose to use. To characterize this element of the change in organizational structure, it is best to identify the proportion of services the hospital delivers to customers with choice.

The first two components of the reform model, decision rights and residual claims, compel managers to focus on financial viability. Thus, knowing which strategies generate the most revenue after the reform becomes critical. If improving service quality and attracting more patients is the best way to get revenue, that strategy will be pursued. If serving a larger number of healthier or otherwise low-cost patients is the easiest way to increase income, then these efforts will also figure into hospital behavior. If political lobbying or extracting monopoly rents is the best way, these strategies will be pursued. In Part 3 of this volume, we see that in many countries, this component of the reform model went awry.

Accountability. The reforms are also characterized by the degree to which accountability for achieving objectives is generated through hierarchical supervision of the organization versus rules and other indirect mechanisms such as regulations, contracting, or boards. As these reforms delegate some decision rights to the hospitals, the government’s ability to assert direct accountability (through the hierarchy) diminishes. Thus, reform plans included a range of accountability mechanisms that would work in the new environment. Most reforms relied as least partially on market pressures to create accountability, as markets were perceived to render a nonpolitical, nonarbitrary evaluation of performance, at least its economic performance. In some cases, where the capacity of government funding authorities was higher, efforts were made to move toward purchasing with these funds. These countries intended to rely on this
purchasing (and the contracting and monitoring process) to generate accountability.

As we know, both market failures and social values prevent health markets from delivering the full range of sectoral objectives. Thus, rules and regulations regarding the operation of these organizations constitute an additional form of accountability mechanism. Strengthening these indirect mechanisms is a fourth critical element of organizational reforms that reduce the use of traditional, hierarchical accountability mechanisms.

**Social functions.** The final critical factor determining the impact of these reforms is what was done with regard to social functions. As autonomization and corporatization often compel hospital management to focus more on financial viability, management is likely to decrease output of services that do not at least pay for themselves. The financial bottom line thus undermines the ability to cross-subsidize certain services internally.\(^{31}\) The marketizing organizational reforms discussed in this volume deal with this factor by creating alternative, more explicit mechanisms to ensure the continued delivery of such services. These mechanisms include explicit funding, demand-side subsidies, and regulation and development of insurance—changes that were often overlooked or not implemented in the cases described in this book. Complementary reforms that can protect nonefficiency objectives such as access for vulnerable groups and quality are further discussed below.

**External Environment**

The changes made to decision rights, residual claims, market exposure, and the like, characterize how things “feel” for the hospitals and management after the reforms. However, policymakers’ discussions almost never take place at this rather academic level. The focus of these discussions, and the object of policymakers’ actions, are three factors that are somewhat external to the hospitals: governance arrangements, funding arrangements, and the market environment. The changes in these arrangements undertaken in the reform take
place in the external environment. The policymakers’ actions regarding these elements of the external environment determine what happens with regard to decision rights, residual claims, and so forth, which in turn determine the incentives for the hospital after the reforms.

Reform debates often focus primarily on hospital governance arrangements. However, the governance structure alone does not determine the organizational structure or incentives. Rather, governance arrangements combine with the other two features to fully determine the important elements of the hospitals’ organizational structure after the reforms. For example, while governance changes may give the hospital the right to keep leftover revenue, you have to look at the funding arrangements to understand what incentives related to revenue generation the hospital actually faces. Also, the governance changes may expose a hospital to the market for services, but you have to know whether there are any other hospitals that could provide the same services to know whether or not competition will emerge to exert pressure on the hospital.

Hence the market exposure element of the organizational structure captures these combined features by asking what portion of the hospitals’ customers or payers have choice. To be a meaningful framework for understanding hospital incentives, components of the organizational structure must elaborate on the actual key conditions that influence hospital behavior, not just the formal provisions as recorded in the legislation.

**Governance.** Structural changes in governance, the relationship between the organization and its owner(s), influence the incentive regime in different ways. Governance arrangements vary substantially in the amount of autonomy given managers, the mechanisms used to generate new incentives, and the provisions for accountability.

**Funding or payment arrangements.** The relation between payment arrangements and the new organizational structure directly influences hospitals’ incentives. The governance structure and the payment system jointly determine three of the key determinants of
provider behavior: distribution of residual claims, provisions for social functions, and market exposure (figure 1.2).

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 are 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.

Social functions. As hospital managers start to cost out their activities, the payment system (sometimes combined with price setting or regulation) will 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 will need to take this into account. The payment system will determine the degree to which unfunded mandates based on internal cross-subsidization become explicit and funded (box 1.5).
Box 1.5 Internal Markets versus Performance Budgeting: What’s the Difference?

Two common funding arrangements used for autonomized/corporatized providers are performance budgeting and purchasing in internal markets. These funding systems differ in three critical areas: specificity, competition, and risk.

Performance budgeting is a general agreement for funding in exchange for delivering certain services or products—where the funding level is tied to explicit performance results and quality indicators (utilization, average length of stay, staffing ratios, infection rates). Purchasing via internal markets usually entails much greater specificity on what is being purchased (rather than funded). Hence, revenues are tied to output more directly, although other performance indicators such as quality are also contracted for. In internal markets, purchasers subject their choice of provider to competition.

The specificity of output contracted for, combined with competition, reduces the provider’s ability to directly pass through all costs and cost increases in their reimbursement. This enables greater shifting of risk for delivery cost to the provider. While it strengthens the incentive for efficient delivery, it also encourages cream skimming for low-cost patients.

Market exposure. Market exposure is perhaps the most obvious behavioral determinant of the reform model influenced by the funding arrangements. Funding arrangements influence market exposure, by determining the relative importance of different payers (government, insurers, individuals). Some of the reforms we are examining, for example, increased hospitals’ reliance on private payers, sometimes insurers, often out-of-pocket. Funding arrangements also influence market exposure by determining the degree to which gov-
Government payers act strategically to exert pressure through their purchasing and funding decisions.

**Market environment.** The market environment most directly influences market exposure. As noted above, governance and funding arrangements may be altered to compel a hospital to focus on generating revenue through delivery of services. If the hospital is a monopolist in its catchment area, however, it is not in any meaningful way exposed to a market. Thus, we have to look at the market environment to determine if a reform increased a hospital’s exposure to a market. In some of these reforms, competition was intended to be one source of accountability. Hence, the market environment also partly determines whether this indirect accountability mechanism was actually established (figure 1.3).

![Figure 1.3 Forces Determining the Level of Competition](image-url)
Reform Modalities

Hospitals’ incentives are thus shaped by these five elements of the organizational structure after the reforms: decision rights, residual claims, market exposure, accountability, and social functions. How, then, do these features fit into different organizational reform modalities: from budgetary organizations (the least autonomous and least exposed to the market), through autonomized and corporatized organizations, to privatized organizations (the most removed from government control and most exposed to market forces)?

Budgetary Organizations

Let us begin with a budgetary unit such as a hospital run as a government department, where the hospital manager is essentially an administrator. The government’s hierarchy of officials and rules controls all strategic issues and determines most day-to-day decisions related to production and delivery of services—from staff mix, staff size, and salaries to services offered, technology used, and accounting and financial management methods.

Usually, the government determines the hospital’s revenue through a direct budget allocation, based on historical norms. Other revenues are controlled as well, since the government also controls services rendered, patients served, and permissible copayments. Any “excess revenues” belong to the public sector—and must either be returned to a superior agency or spent as directed. Any “excess losses” are covered by the public purse. In this sense, the public sector is the residual claimant of the hospital operating as a budgetary unit.32

The government’s objectives in running the hospitals closely resemble sector objectives and are often unrecorded and unmonitorable. The social functions performed by the hospital are not distinguished from its other activities—nor are they funded separately. Bureaucrats in the hierarchy are responsible for monitoring hospital and managerial performance, usually tied to input and financial control.
Autonomized Organizations

Dissatisfaction with budgetary organizations’ weak performance has led to various approaches to reform. Many of the most serious efficiency and quality problems have been tracked to management’s pervasive lack of control over resources (especially labor) and production (service delivery). Autonomization focuses on “making managers manage”—by shifting much of the day-to-day decision-making control from the hierarchy to management.

Increased scope for generating revenue tied to service delivery often accompanies these changes. 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. Only if revenue can be retained do additional revenue opportunities motivate. Therefore, autonomization reforms increase an organization’s scope for retaining revenue. Often, this is partially achieved by moving from a line item to a global budget, whereby savings in one service or budget area can be shifted to another. In this sense, the hospital or clinic becomes a partial residual claimant on certain savings from cost cutting or other improvements.

Accountability arrangements still generally come from hierarchical supervision but with more clearly specified and narrowed objectives focused on economic and financial performance. An agreement between the government and hospital management may specify monitorable performance targets and responsibilities for performing social functions. A board may be created to exercise supervisory control, thus mimicking private sector governance structures.

Autonomization in the health sector has led to a wide variety of arrangements and differences in managerial autonomy. 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, employed directly by the health ministry. In some cases, the organization has been legally established as a new form of government agency—which serves to define the new governance arrangements, secure the changes made, and persuade management that the changes are irreversible. Accountability
arrangements have taken many forms—but all of them make some attempt to specify performance requirements in advance and to monitor their achievement.  

Sometimes these performance requirements are recorded in a framework agreement or performance contract. This mechanism is intended to narrow and clarify the organization’s objectives as well as to lay out formal criteria for evaluating management. Occasionally, a board of directors is created to implement the process of monitoring managerial performance and to depoliticize decisionmaking. As mentioned, these reforms are often accompanied by a move to global budgeting or performance-related payments, which leaves some efficiency gains in the hospital.

**Corporatized Organizations**

Corporatization reforms have evolved from efforts to mimic the structure and efficiency of private corporations while ensuring continued emphasis on social objectives through public ownership.

Under corporatization, provisions for managerial autonomy are stronger than under autonomization, giving managers virtually complete control over all inputs and issues related to service delivery. The organization is often legally established as an independent entity, making the transfer of control more durable than under autonomization. A corporatized entity’s status includes a hard budget constraint or financial bottom line—which makes the organization fully accountable for its financial performance. In case of insolvency, liquidation is at least theoretically possible. Management’s greater latitude is complemented by market pressures as an important source of incentives, crucially including some element of competition or contestability.

These market incentives come from the combination of a hard budget constraint and increases in the retained portion of revenue from sales (instead of budget allocation) and discretion over its use. The corporatized hospital is thus much more a residual claimant than the autonomized one—in that it can retain excess revenues but must also bear any losses. Accountability mechanisms usually take
three forms: direct hierarchical control (or ownership accountability), funding/payment, and regulatory accountability. The ownership accountability that remains is usually manifested via a board. The hospital’s responsibilities are usually narrowed to cover primarily economic targets—as part of the effort to mimic the effective governance structures associated with private corporations (box 1.6).

However, this emphasis on economic performance necessitates alternative arrangements for ensuring continued delivery of social functions (services previously cross-subsidized). Under corporatization, access to these services is usually pursued through purchasing, insurance regulation, demand-side financing, or mandates that apply to all organizations, not only to public facilities.

In practice, when a hospital is corporatized, it is often established as a private corporation, though still publicly owned. The accountability mechanisms are anchored in the board, and often include some form of corporate plan, a binding agreement between the hospital (and its board) and the supervisory agency. The 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 to justify long-term asset retention within the organization and to pay commercial dividends from those returns.

The reliance on accountability from market pressures to earn revenue has necessitated the establishment of a functioning framework for direct payment or transfers to reimburse the hospital for the costs of pursuing noncommercial objectives. Instead of forcing the hospitals to deliver services below cost to the poor, for example, an appropriate subsidy may be delivered to either the patient or the hospital. Later we will explore some important issues associated with the complementary funding or purchasing reforms needed to support marketizing organizational reforms of hospitals.

In a corporatized hospital, directors (board members) usually have absolute responsibility for the hospital’s performance and are fully accountable to the responsible minister. They are sometimes responsible for bringing the hospital’s operation into conformity with world best practice (with necessary modifications for noncommercial
Box 1.6 Market Environment: Structure and Competition

The structure of the market to which the reformed hospitals are exposed vitally influences their behavior—as it directly determines which revenue-generating strategies make sense. A central argument for exposing providers to market forces is that competitive forces in a functioning market lead to a more efficient allocation of resources than command economy or nonmarket solutions (figure 1.3). In a wide range of sectors, enhanced competition has led to increases in productivity, efficiency, quality, and innovation.

In the health sector, however, market structure is problematic in two respects. First, little or no competition may emerge—reducing pressures on the provider to deliver “value for money” to maximize profits. Alternatively (or in addition), competition may emerge, but it may be dysfunctional.

Some health services, especially tertiary and quaternary, exhibit scale economies in production—which relieves incumbent hospitals of pressure from new entrants. Geographic monopoly over certain services may leave buyers with little leverage to negotiate with service providers.

Even for services where monopoly power is not an issue, providers may still capture market share or maximize profits through various forms of distortionary behavior. For example, medical treatment is to a large extent a “bundled” good where the seller (doctor) guides patients’ consumption decisions—which hospital to choose for surgery, which lab for diagnostic services, and so on. Thus, the provider’s information advantage can be parlayed into control over a lucrative referral chain. Doctors may “forward-integrate” into diagnostic labs or pharmacies and steer their patients toward consumption where the referring physician has a financial stake. Hospitals may “backward-integrate” by creating strong links with doctors, thereby insulating themselves from competition for patients. Medical professionals are fre-
government requirements). Reviews, including comparison with this benchmark, are included in corporate plans.  

Privatized Organizations

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

Privatization removes the hospital from all direct control of the hierarchy of government officials or public sector rules. The organization is thus fully independent of the hierarchy, although the management is likely to be constrained by the new owners or trustees. All incentives come from opportunities to earn revenue, and they are strong, since private owners or shareholders (in the case of for-profits) are the residual claimants on extra revenues, now called “profits.” These two forces drive this model’s high-incentive features—complete market exposure to earn revenue and strong owner motivation to capture revenues and monitor management.

The owners of a privatized hospital have at their disposal the full range of institutions developed in private corporations to ensure good governance or monitor relations between the owner and manager. Dissatisfied owners can voice their views—through their selection of board members or, more commonly, by divesting. Stock or dividend performance can alert owners or boards to poor management performance. For managers, the job market creates pressures to perform well to maintain their employment, reputations, and employability.

Anticipating problems in dealing with profit-maximizing providers, many countries are exploring nonprofit privatization as an alternative. This consists of transferring or converting a public hospital to a nonprofit, which differs in its governance from a for-profit entity. Because ownership is private, the hierarchy does not directly control the hospital in any way. In some countries, however, regulatory requirements to maintain nonprofit status, and hence subsidy eligibility, mean that the government retains certain “control” rights.

Governance of privatized nonprofits conceptually resembles that of corporatized hospitals more than privatized for-profits for two reasons (box 1.7). First, through nonprofit regulation, governments exercise strong but indirect and voluntary controls over them. Second, there are no private residual claimants on leftover revenues.

In a privatized hospital, market pressures complement performance pressures from owners. Owners want profits, and succeeding
Box 1.7 Good Governance: What Is It and Why So Little in Public Hospitals?

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

- **Objectives.** Narrow, clear, nonconflicting objectives of owners translate into narrow, clear, and measurable criteria for management performance. In private (for-profit) companies, managers can be monitored easily because owners have two clear objectives—maximize profits and maximize share price. Both criteria are observable and measurable.

- **Supervisory structure.** Responsibility for supervising management is vested in an effective, professional body (e.g., board of directors) that itself has clear responsibilities and accountabilities.

- **Competitive environment.** Competition in the product, labor, supply, and capital markets promotes managerial efficiency by forcing the adoption of the most efficient production arrangements 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 management might misallocate, or use to hide weak performance. Ability to monitor performance, combined with a competitive managerial labor market, allows owners to compare company managers’ performance and motivate managers through 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 followed.

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

- **Fuzzy or conflicting 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).
- **Weak supervisory structure.** Accountability mechanisms are weak and input-control focused. Objectives are not usually translated into narrow, clear performance criteria for management. Often, there is no effective structure for monitoring managerial performance. Politicians and bureaucrats involved with supervision have room to pursue their own (nonhealth-related) agendas—such as jobs or sinecures for loyal supporters.
- **Poor information environment.** Even with managerial performance criteria, monitoring may be impeded by lack of competition or other 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 on technical or professional bases. The objectives are usually 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 repaying 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 opaque interventions.** Old habits of informal intervention by “owners” in hospital operations are usually perpetuated by failure to establish an oversight structure that ensures accountability for the narrowed range of goals or by failure to develop or ensure the use of other mechanisms to achieve key sector goals (e.g., related to access and equity).

- **Failure to identify and fence off “social” goods.** Governments often have a hard time clarifying which “social” services they want delivered and targeting subsidies effectively. Hospitals can end up relying on internal cross-subsidization. Management may then try to excuse poor economic performance or failure to meet targets by citing ad hoc

(Box continues on the following page)
interventions, unfunded mandates, and their associated costs. This reduces the supervisor’s ability to hold the hospital accountable.

Why these failures?

• **Internal stakeholders disagree.** Defining narrow objectives is hard in health because multiple interests in government may well disagree on what the key objectives are or ought to be. Government-owners may have many health care objectives but no sense of priorities.

• **Clear objectives and priorities reveal trade-offs.** Specifying objectives and priorities can make explicit what the state will and will not fund. This is often a politically costly action.

• **Challenging new tasks for bureaucrats.** Creating alternative mechanisms to pursue other sector objectives (besides organizational efficiency) is hard because it forces governments to engage in more complex activities (like contracting, purchasing, and regulation). Under an integrated public system (budgetary organizations), governments can pursue sectoral objectives through implicit understandings that they will transfer a certain amount of resources and the hospitals will provide all takers with services in some form. Under an organizationally reformed system, the government would have to identify which services would be delivered to the poor (for example), and purchase (or sometimes mandate) and monitor their delivery.

• **Bureaucrats prefer direct control and discretion.** Under indirect accountability mechanisms, discretion is intended to be constrained. Politicians and bureaucrats, however, usually prefer ad hoc direct interventions with fewer constraints on their relations with hospitals. Not constrain-
ing these interventions has created many problems in hospital reforms.

Governments trying to improve governance through autonomization or corporatization 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.

Good Governance

- Objectives
  - Clearly defined goals
  - Narrow scope
  - Achievable targets

- Supervisory structure
  - Independent
  - Professional
  - Transparent

Hospital

- Market exposure
  - Capital market
  - Supplies market
  - Labor market
  - Products market

a. These mechanisms include accountability mechanisms stemming from funding/payment arrangements and regulatory mechanisms.

in the market is the only way to generate them—competing with other hospitals to increase sales, attract patients, undertaking changes that decrease costs, and so on.

Privatization requires even more systemic reforms than corporatization to complement the hospital reforms—to ensure that social objectives such as access, equity, and clinical effectiveness are not
sacrificed in the name of efficiency and consumer quality. Reforms to increase regulatory capacity and to establish effective purchasing arrangements are particularly crucial.

**Results and Lessons from Outside the Health Sector**

Relevant experience from other sectors provides useful insights. These insights are especially valuable since the reforms have only recently been applied in health, and they haven’t been as rigorously evaluated as in other sectors (box 1.8).

**Autonomization**

Autonomization has improved performance in some public agencies that produce unspecifiable or unsaleable outputs such as policy advice or policy implementation, but it requires fairly sophisticated institutional arrangements to work.38

With production and service delivery organizations outside the health sector, the results of autonomization reforms have been disappointing. In many cases, management has been given too little control over production to enable or encourage a response to the newly created rewards for performance. In other cases, substantial autonomy was given, but accountability arrangements were ineffective. A comprehensive review of performance contracts throughout the world found that their influence was weak and often negative.39 The key reasons cited were:

- The informational advantages of managers over government officials enabled them to negotiate contracts that did not require high performance (i.e., they were able to maintain organizational slack).
- Contracts rarely rewarded or penalized managers or staff.
- Governments often reneged on their promises to the organization’s management by formally or informally retaking control, thereby interfering with management decisions.
In practice, autonomization outside the health sector usually failed to introduce durable changes in incentives, either because the reforms were not fully implemented or because they lacked internal coherence. Frequently, alternative accountability arrangements were never realized, encouraging reversion to previous mechanisms or creating a vacuum. For these reasons, corporatization and privatization have become the preferred types of organizational reform for commercial and infrastructure enterprises.40

Box 1.8 Key Lessons from Other Sectors

- Organizational reform must address labor issues directly and up front. Leaving labor “for later” is at the root of many reforms that have failed to have an impact on efficiency and performance problems.
- Institutional innovations can allow organizational reform to be applied to new areas. Unbundling can enable market forces to be brought to bear in many areas previously thought to be natural monopolies. For example, concessions can create competition “for the market” when competition in the market is impossible.
- Intermediate reforms of autonomization and corporatization are more institutionally intensive—they imply a more sophisticated role for government—because government must use indirect disciplining forces instead of simpler instruments of direct control (as in a budgetary organization) or market forces (as in a privatized organization).
- A supportive external competitive environment must accompany reforms in internal incentives. If this environment is not present, systemic reforms may have to be implemented before organizational reforms can work.

In practice, autonomization outside the health sector usually failed to introduce durable changes in incentives, either because the reforms were not fully implemented or because they lacked internal coherence. Frequently, alternative accountability arrangements were never realized, encouraging reversion to previous mechanisms or creating a vacuum. For these reasons, corporatization and privatization have become the preferred types of organizational reform for commercial and infrastructure enterprises.40

Corporatization

Corporatization has also had mixed results in commercial and infrastructure enterprises. In some cases, performance improved, but im-
provements were not sustained. In other cases, failure to implement key aspects of the model led to poor results. In every case, effective corporatization appears to have entailed intense organizational reform of the enterprise, one necessitating a sustained, complex, and politically challenging role for government agencies and officials.

The main problems connected with corporatization are rooted in the failure to depoliticize decisionmaking in a sustainable way. First, the board or management has rarely been made responsible for fulfilling a sufficiently narrow and clear set of objectives. Second, financial accountability has not been created; managers are simply better informed about costs and turnover. This problem is severe in enterprises that remain responsible for delivering some goods or services without payment. This unfunded mandate, by blocking comparison with providers that do not carry that burden, often gives management a convenient excuse for poor performance.

Few governments have truly exposed corporatized enterprises to competition. Instead of limiting funding to what would be commercially obtainable, they have continued to give troubled enterprises capital injections. This has substantially reduced market pressure. Rarely have governments succeeded in removing systemic privileges for corporatized enterprises. Beneficial regimes for price setting, capital allocation, purchasing, and tax provisions all have prevented a leveling of the playing field. In most cases, market forces have not been allowed to play their full role in creating accountability.

While a lack of competition has muted pressure to improve performance, corporatized enterprises have also suffered from continued constraints related to public sector ownership. Rules limiting individual access to loans are one such constraint. Management often mentions as a key problem its inability to raise capital for service expansion and capital renovation based on a business plan or project viability. This limitation is also used to explain failure to improve, hence diminishing accountability.

**Privatization**

Privatization of commercial and infrastructure enterprises has generally led to good results: improved productivity, wages, and, for
government, tax revenue. Subsidies could be cut, thereby reducing the fiscal drain associated with the enterprises while under public control. In infrastructure, quality and availability of services has generally improved.\textsuperscript{43}

Competition faced by enterprises is a key determinant of performance, perhaps even more so than privatization itself. However, even in markets where competition is weak, the performance of privatized enterprises has improved.\textsuperscript{44} Privatized entities, however, do not make special provision for the poor. In enterprises producing services of social import, additional steps have been needed (i.e., direct subsidies, price regulation) to ensure that commercially run providers continue services to the poor or other needy users. Well-designed organizational reforms have included changes in both funding and regulation and have been successful in addressing these potential conflicts.

**A Coherent Approach to Organizational Reform and Altering Incentives**

Based on our discussion thus far, one important issue emerges related to the design of organizational reforms: the internal coherence of the reform package and its fit with the institutional and market environment.

**Internal Consistency of Reform Package**

Both the theoretical literature and experience in applying these reforms to other sectors point to critical linkages among the reform elements. Different parts of the organizational structure must be aligned with each other. For instance, managers who have incentives to cut costs must also have the ability to alter the use of the key cost drivers, including labor.

**External Consistency of Reform Package**

In addition to internal consistency, the components of the external environment must fit together. The governance arrangements cre-
ated must complement the funding arrangements. Both funding and governance arrangements must be congruent with the market environment. It is extremely challenging, however, to harness the market environment to reform objectives. In most cases, this factor was taken as a given, and reform packages focused on governance and funding arrangements.

**Using market structure.** Under these reforms, markets are relied upon to create pressures for improved performance. While health services present unique challenges, the generic prerequisites for functioning markets must be fulfilled in any event. Providers must compete with each other. Contracts must be enforceable. The legal and judicial framework to review anticompetitive practices and enforce consumer protection will play a heightened role. Some weaknesses can be addressed with the instruments discussed below. However, the government’s capacity to generate these conditions changes only slowly. Hence successful reforms will either take them as given, or rely on only incremental improvements.

**Fit with the institutional environment.** Besides matching each other, the key elements of the organizational reform package must also be consistent with the more general institutional environment. For example, reforms must explicitly take into account the capacity of public organizations, especially those that will be directly involved in the reforms. Since these reforms will reduce the government’s direct control over provider organizations, indirect control mechanisms become doubly important. The soundness of the government’s capacity regarding budget management, procurement (contracting), regulating, monitoring, and auditing will play a crucial role in encouraging the reformed hospitals to respond productively to their new freedom. Reform packages may thus need to include measures to strengthen the public sector functions identified as most critical to the new incentive and monitoring regime.
Complementary Reforms and Sector Objectives

Marketizing organizational reforms move health services closer to a market environment and encourage providers to focus on their financial viability. When a government department performs service delivery, sector objectives can be pursued through direct control of the providers. However, when providers are encouraged to respond to market incentives, critical sector objectives may be threatened, including quality, cost control, and access for the poor. In these areas, the government must make up for lack of direct control through enhanced dissemination of information and the creation of an effective regulatory and contracting framework for health services. The further one goes toward a market-based incentive environment, the more important these complementary reforms become (figure 1.4).

Access and equity. As providers become increasingly concerned about their financial viability, they will be more reluctant to provide unre-}

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**Figure 1.4** Complementary Systemic Measures for Organizational Reforms to Work

- Budgetary unit
- Autonomized unit
- Corporatized unit
- Privatized unit

- Information
- Regulations
- Contracting

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tion among patients or services will cease to be a viable mechanism for ensuring availability of important services or access for the needy. Problems of equity and access will emerge, unless the government addresses these problems through other mechanisms.

Where once the government pursued universal access to services through direct control of delivery, it may now have to contract for delivery of these services, and public servants will have to develop new skills for contracting or purchasing. This new way of operating may also provide a strong instrument for cost control through a national global cap on expenditures.

Where the government itself is not the sole or primary funder of health services, effective regulation of purchasers or insurers is needed, in addition to whatever contracting the government does. Government contracting, subsidization, or mandates on coverage for services delivered to the poor is critical—especially if the reformed hospitals and clinics have previously been playing a safety net role.

As organizational reforms increasingly shift risk for the cost of services onto providers, the usual tendency to engage in cream skimming will emerge. Thus, regulation and monitoring of such practices is a critical reform element.

**Quality and cost escalation.** Questions about quality can arise from the principal-agent structure of the doctor-patient relationship. Patients must rely on doctors to make clinical and therapeutic decisions on their behalf. However, the doctor may have different objectives from the patient’s. Doctors may prescribe one treatment over another because they can earn more money from it, even if it costs the patient more or may not be the most effective method of treating the patient’s condition.

Profit maximization is a strong motivating force for bad as well as good. It can encourage service providers to behave opportunistically, to take advantage of their information asymmetry vis-à-vis patients and purchasers, and to skimp on unobservable quality features of care. Effective mechanisms to enable monitoring of quality are required to ensure that the providers are motivated to supply high-quality and clinically effective services. Prescriptive quality regula-
tions can be complemented by information to support patient oversight (as individuals or through consumer groups) and by effective government contracting for quality services.

Market forces can put pressure on profit-maximizing providers to give quality care and keep prices down. But a large and cohesive group of providers has market power and can work to block competition. To head off anticompetitive behavior, pro-market regulations and regulatory capacity must also be put in place.

Moral hazard problems also occur in the doctor-patient relationship because a third party (government or insurer) often pays for health care, leaving neither doctor nor patient with any incentive for cost economy. Thus, additional cost-escalation pressures are likely to occur as providers move to market incentives. A critical element of marketizing organizational reform is thus to ensure that government contracting or purchasing is sufficiently effective to put pressure on providers to deliver quality services—both in terms of responsiveness to patients and clinical effectiveness.

A discussion of effective regulation of various forms of health insurance goes beyond the scope of this book. But one thing is certain: organizational reforms to make government providers efficient and responsive will not work if their customers/payers do not insist that they deliver low-cost, high-quality services.

Nonprofit regulation. Converting public facilities into nonprofit organizations will create a separate set of regulatory challenges related to the unique nature of nonprofit organizations in providing services for the “public good.” To support the delivery of social services, governments commonly grant financial benefits such as tax exemptions and tax deductibility of contributions to nonprofit organizations. Effective targeting is crucial to ensure that these forgone revenues are well spent. Such support should go only to nongovernmental institutions whose primary activities center on delivering care benefiting the population.

Verification of the social benefit nature of nongovernmental activities to qualify for preferential treatment is a critical feature of an effective regulatory framework for nonprofit organizations. In addi-
tion, transferring public assets to the nonprofit sector usually entails a concessionary price, based on the understanding that these assets will continue to be used for the public good. Thus, the government must create regulations, as well as monitoring and enforcement capacity, to ensure that new owners do not dissipate the value of these assets for private gain.

For some goods and services, there are few serious problems related to market failure, including most factor inputs (other than labor), medical goods and supplies, and nonprescription drugs. In these cases, the only complementary reforms needed may be to improve information disclosure to help purchasers make informed choices.

Conclusions

What can readers take away from this discussion? Organizational reforms are complex, and key elements are interconnected. Internally, the elements of the governance reforms must fit together if the desired high-powered incentives are to develop. Externally, these incentives must be complemented and directed by pressures and constraints from government funding arrangements as well as market forces.

In reviewing country experiences with these reforms, readers should look closely to see how well they meet these consistency requirements. Did the reformers get the “dial settings” right?

Notes

1. Although the hospital is the organizational unit examined in this volume, much of the discussion applies generically to a wide range of provider organizations.

2. There are major variations in the distribution of these resources across the world and within countries, with the greatest concentration in richer countries and urban areas, Central Europe, and the former Soviet Republics.


7. Ibid., chap. 3, pp. 41–60.

8. Examples of institutional innovations include unbundling of competitive from monopolistic components of a previously vertically integrated industry, which has allowed competition to replace regulation in many areas, and tendering of concessions, which has brought competitive pressures to bear even on networks—by auctioning off the right to run the network for a period of time, creating periodic competition for the market.


13. Ibid.


18. For example, a person may own a house but not have the right to occupy it if he has leased it out. He may own a car but not have the right to transfer it freely if he has a loan secured by the car.


20. Allocative efficiency in this context refers to cost-effective use of public resources. In reform programs that emphasized this objective, the organizational reform delinking the funder from the provider was viewed as an instrument for breaking the “provider capture” inherent in systems allocating resources to inputs (hospitals, doctors) rather than population or services.

21. Here we refer only to management reforms within existing organizational structures (nonstructural) to avoid confusion with the
structural/organizational reforms we are reviewing in this volume, many of which obviously affect management.

22. Changing administrators into managers: The emphasis on managerial skills is indicative of a trend to hold those in control of public service organizations accountable for outputs or outcomes rather than for administering services in an acceptable fashion.


26. This volume only covers autonomization and corporatization, that is, marketizing organizational reforms that maintain public ownership. Privatization fits within the same conceptual framework, but also involves a transfer to private ownership, which brings in a number of additional issues that are beyond the scope of this material.


28. This definition refers to “organizational governance.” There is another form of governance relevant for health services, and that is “sectoral governance.” Sectoral governance refers to the structure and activities undertaken to monitor and enhance the performance of the overall health sector, and hence includes such activities as regulation, information dissemination, and mandates.

29. Wilson, *Bureaucracy*.

30. Ibid., p. 117.
31. This movement away from internal, implicit cross-subsidization is often an explicit objective of organizational reforms in other sectors. Some scholars, notably M. Pauly, believe it should also in health services. See M. Pauly, “Health Systems Ownership: Can Regulation Preserve Community Benefits?” *Frontiers of Health Services Management* 12 (3): 3–34; discussion 51-2 (spring 1996).

32. This description does not address the well-documented cases of retention of copayments or informal payments by employees or management—which makes them also residual claimants, though informally.

33. It is useful to distinguish between *ownership accountability arrangements*, which are tied to the governance relations between the government and the organization (i.e., corporate plan, performance contract), and *funding or payment accountability arrangements*, which are generated by the structure of the payment or funding mechanisms.

34. Reforms that transform hospitals into public corporations—corporations governed by public rather than private, company law—are also used in some cases.

35. Benchmarking is also an important tool for purchasers to help them set reimbursement by diminishing the informational advantage of hospital management through comparison with similar institutions.

36. In the case of nonprofit organizations, the need to sustain themselves over time requires that they usually cover at least their operational costs, even if donations are forthcoming to cover capital costs.


46. A “nondistribution” constraint is a critical component of nonprofit organizational rules—blocking distribution of residuals to any individuals.
Implementing Organizational Reforms to Hospitals in the Public Sector

Chris Ham and Loraine Hawkins

CHAPTER 2

The “slip between cup and lip”—the frequent gap between policymakers’ intentions and the results of health care delivery reforms—has prompted extensive analysis of the way policy becomes practice. From these studies have come advice and recommendations on ways of implementing policies more effectively, which is relevant to the reforms of the hospital sector described in this volume. In parallel, analysts, focusing on the role of actors in agencies responsible for implementation, have highlighted the difficulties of delivering policies on the ground. Through negotiation and adaptation during implementation, policies are often refashioned, leading to outcomes different from those intended at the outset, according to these analysts. From this perspective, the failure to implement policies is less surprising than the fact that they have any impact at all, considering the hurdles to be surmounted in translating policymakers’ intentions into action.

Accumulated research into implementation has progressively challenged the linear model of the policy process that informed much of the early thinking about health care reform. Instead of assuming a sequential relationship between policymaking and implementation and seeing the challenge as one of making this process as smooth as possible, policy analysts have studied action and behavior within public
agencies and the influence of front-line staff or “street-level bureaucrats.” In doing so, they have highlighted the discretion allowed staff and their agencies as an important source of implementation “deficit.”

The issue then became not so much how to design policies to ensure effective implementation but rather how to change the behavior of street-level bureaucrats in the desired action by understanding their motivation and values. By viewing implementation as a bargaining process between actors over time, the focus has shifted to implementation as evolution and to policymaking as a learning exercise. In this way, researchers who adopted a “bottom-up” perspective threw into sharp relief the weaknesses of the “top-down” approach to policymaking, attracting increasing support from students of the policy process. Many of the hospital reforms described in this volume were caught between such top-down and bottom-up pressures.

In reality, policy analysts from both traditions made a significant contribution to our understanding of the complexity of implementation issues, although each offered only a partial interpretation of the phenomena studied. Increasingly we recognize that studies of the implementation of public policies need to draw on the insights of both the top-down and bottom-up approaches by focusing on the range of factors that influence implementation and the role of actors and institutions at different levels. Just as policymakers at the top or center of government can influence policy outcomes, so, too, managers and professionals at the bottom or periphery of government shape, modify, and sometimes initiate developments. Implementation studies must pay attention to both sets of actors as well as the history and context because rarely are policies implemented in circumstances where there are no established interests. Achieving change usually depends on overcoming potential resistance from beneficiaries of the status quo.

The relative neglect of implementation issues applies as much to studies of health policy as to other areas of public policy. In the U.S context, Marmor comments:

The tendency to overlook implementation issues is not surprising, given how difficult, and unglamorous, it is to figure out the
nuts and bolts of real programs—and how much more enticing it is for politicians and policy analysts to bandy about big ideas. The implementation of policy is less visible and less dramatic than the framing of policy—and often, frankly, more arcane. The neglect of implementation issues is more than a simple intellectual mistake; it may be a rational response to the fact that our political system confers more rewards for the shrewd deployment of symbols and generalized arguments than it does for detailed realistic analysis and forecasting.4

One approach to the implementation of health care reform is illustrated in figure 2.1. Starting from the view that policymaking and implementation are inextricably linked, this approach organizes the factors affecting implementation into four categories: context, process, actors, and content. Walt, one of the originators of this approach, emphasizes that, although these factors can be separated for analytical purposes, in practice they are interrelated.5 She argues that the content of policy and its design, issues so frequently emphasized by policy analysts, are often less important in accounting for implementation success or failure than the context, process, and actors. That is why Walt’s framework gives prominence to analysis of the context of implementation, the processes involved in carrying policy into action, and the actors affected.

There are strong similarities between Walt’s framework and Reich’s analysis, which focuses on health care reform in developing countries. Reich sets out a model of applied political analysis for reform, drawing on the insights gained from studies of the politics of policymaking to indicate how implementation problems can be anticipated and overcome.6

The more general point here concerns the importance of bringing a political economy perspective to bear on the study of implementation. The term political economy describes a range of perspectives.7 From our point of view, however, its significance is in indicating the need to examine the interaction of economics and politics, both in theory and in practice. In relation to theory, this means drawing on the insights of the new institutional economics (see chapter 1) as well as the analysis of political scientists who focus on the role of institutions and pressure groups in the policy process.8 In relation to prac-
practice, it entails attending to the economic changes that impinge on policy development and the political response to these changes. Macroeconomic analysis of these factors, in turn, needs to be related to the use of both incentives to promote implementation and political directives to encourage change. Faced with evidence of failure in the health sector by both market and government, a political economy perspective enables us to undertake a more complete and realistic assessment of the factors encroaching on health care reforms, including those centered on the corporatization of public hospitals described in this volume.

Context of Reform

The context of reform in the public hospital sector during the past few years also encompasses historical, economic, political, and institutional factors.

History and Inherited Commitment

History, at its simplest, is important in establishing a series of precedents and commitments that reformers have to confront. Policies
and organizations with a long history may be more difficult to reform than those of recent origin, unless exceptional circumstances such as war or major economic change create conditions that thaw or shatter established arrangements. This means that marginal change is both more feasible and more common than fundamental change. Moreover, because policymakers rarely confronted a blank sheet of paper, what already existed shaped and constrained innovation. In some circumstances, past policies themselves may stimulate change, as when weaknesses in original designs force a reappraisal of current arrangements or when the financial consequences of these arrangements become unsustainable. In Wildavsky’s formulation, policy may be its own cause in a cycle of development that, in some respects, becomes self-perpetuating.9

**Macroeconomic Situation**

In relation to the economy, many countries have sought to constrain public expenditure since the oil crisis of the 1970s. A broadly based program of public sector reform has ensued, in which the set of ideas referred to as the new public management has influenced the policies pursued.10 These ideas have stimulated various efforts to reform health services. The effects have been seen in the epidemic of health care reform in the industrial world during that period, including a reassessment of the role of the state in health care and measures to enhance systemic efficiency and responsiveness.11 There are strong parallels between such reforms in state-owned enterprises and those needed in the hospital sector of the health system.

Interest in corporatization has been integral to this process as policymakers have searched for new ways of tackling perceived weaknesses in service delivery. In Central and East European countries, the move from centrally planned to market economies since the end of the cold war has influenced not only industrial ownership and control but also the financing and delivery of health services and other forms of social insurance.12 In relation to developing countries, Bennett and colleagues have shown how economic recession serves as the catalyst for health care reform, with the most sweeping reform
proposals in countries that had encountered the most severe recession. The macroeconomic environment in this way influences health policy both in relation to the availability of resources and in forcing a reassessment of established delivery mechanisms.

**Political Debate on Role of the State**

Changes in the economy have been instrumental in shifting the terms of political debate. The post–World War II consensus on the expansion of the welfare state has broken down as politicians of the Center-Right have questioned the size of the public sector and the balance between collective and individual responsibility in the face of increasing evidence of government failure. Incremental policy development has therefore become less common, and more radical options have been proposed. This trend has found expression in some quarters in the argument that, as part of a fundamental reappraisal of government intervention in health care, the role of the state should be limited to providing a safety net for citizens unable to make their own provision. Less radical have been moves to encourage an expansion of private financing and provision alongside that of the public sector and to make health care more businesslike by importing ideas from successful companies.

Yet political debate has fluctuated as enthusiasm for private financing and service provision has been superseded by recognition of the weaknesses in health care markets, including managed or quasi-markets. As a consequence, the state continues to fund around three-quarters of total health care expenditures in industrial countries, and there has been no significant retreat from the commitment to basic social goals like ensuring access to necessary medical care and pursuing equity through government regulation of the health sector. This commitment has an important bearing on the implementation of corporatization reforms in the hospital sector in that the authorizing environment may not give actors the support needed to pursue these reforms. Implementation is particularly problematic in these circumstances.
**The Institutional Environment**

Political debate about the role of governments and markets in health care has been rehearsed in an environment in which a number of institutions stand to gain or lose from change. On balance, the inertia of these institutions has been more evident than their enthusiasm for change, illustrating Machiavelli’s aphorism that

> there is nothing more difficult to carry out, nor more doubtful of success, nor more dangerous to handle, than to initiate a new order of things. For the reformer has enemies in all those who profit by the old order, and only lukewarm defenders in all those who would profit by the new order.\(^\text{15}\)

Pierson, in his comparative analysis of welfare reform in the United Kingdom and the United States, provides a practical illustration of the impact of history on policymaking.\(^\text{16}\) As Pierson notes, welfare reform under Prime Minister Margaret Thatcher and President Ronald Reagan delivered much less than promised, partly because past policies generated support for services from both recipients and the agencies delivering these services. The cost to politicians who challenge existing arrangements is often considerable, and retrenchment therefore usually occurs indirectly rather than through frontal attack. In this way, institutions act as a barrier to change, reinforcing the argument of analysts who assert that an institutional perspective is central to understanding the dynamics of policymaking.

**Dominant Values**

The values that inform health policies and the respective roles of the state and the market cut across economic, political, and institutional factors. Dominant values may be deeply entrenched and, like established institutions, can act to protect the status quo and constrain the set of policy options placed on the agenda and the manner of implementation. Only at times of real or perceived crisis will these values be questioned and the opportunity for radical reform created. The nature of these values and the policy response will vary from country
to country. Also, the implementation of policies to reform health services will depend on the degree of consistency or fit between the values embedded in these policies and those held by actors in the system. As an example, corporatization may be viewed quite differently in health care than in state-owned industries because of the attachment citizens feel to public health care. In view of the importance of values, politicians may obfuscate while pursuing changes that might be unpopular or while seeking to implement their policies in stages.\footnote{17}

In implementation, it is the interplay between the factors influencing context that is important. Global economic trends have different effects in different systems, depending on the response of politicians and the role of institutions and dominant values. Although certain general tendencies can be discerned, the relationship between context and policy is contingent and variable, and the impact on public policy of economic recession or political realignment is unpredictable. The radical response of the Center-Right to changes in domestic and international economies that occurred in the 1980s in New Zealand, the United States, and the United Kingdom was not emulated in West European countries where social democratic values remained resilient. Actors both in the political systems and in the health care system mediate the effects of context and put their own imprint on the reform agenda.

**Actors**

Many different actors can influence policy implementation: politicians and bureaucrats, managers and health care professionals, the public and patients, public sector health workers, and stakeholders.

**Politicians and Bureaucrats**

The most important actors—politicians and bureaucrats—hold positions of power within government. By definition, many policies originate among these actors, and their determination and consistency of purpose (the “political will” to produce change) are likely to be cru-
cial in ensuring effective implementation. In this context, government is plural and not singular, and differences between these actors (e.g., between politicians in governing coalitions, politicians and bureaucrats, health ministries and finance ministries) can make policy implementation more difficult. Changes in the party or parties in power will also have a bearing on implementation, in extreme cases leading to a complete about-face. Research into policymaking has highlighted the influential role of bureaucrats at certain points and of politicians at others, suggesting that the contribution of each needs to be considered.

**Managers and Health Care Professionals**

Managers and health care professionals responsible for implementation of policies at a lower level also exert influence. Indeed, many policy analysts believe these actors hold the key to understanding the dynamics of power and decisionmaking in health care. Managers and professionals express their influence partly through their representative bodies and partly in their day-to-day work as street-level bureaucrats in the health care system. The way lower level managers and professionals interpret policymakers’ intentions can have a significant bearing on what happens in practice whenever loose policy definitions leave room for interpretation.

This helps to explain why policymakers may pay special attention to anticipating potential resistance from managers and professionals, including the adoption of “divide and rule” strategies. For example, in recent health care reforms in the United Kingdom, financial incentives were offered to encourage family doctors to hold down budgets and to persuade managers to volunteer their hospitals to become self-governing organizations. These incentives avoided the impression that the reforms were being imposed and allowed for implementation to be phased in. The United Kingdom’s experience during this period demonstrated that seeing managers and professionals as a cohesive group would be a mistake. There are divisions within each category, and the balance of power has also shifted between managers and professionals. Indeed, health care reforms may
deliberately seek to strengthen the role of one group vis-à-vis the other, as in the steps taken in a number of systems to hold professionals accountable to managers for their performance.

Managers are not only involved in the implementation of politically initiated reforms but may also themselves be a source of innovation. This point is at the heart of the bottom-up perspectives on implementation. It is emphasized by Moore, who challenges the passive view of public sector managers conveyed in traditional accounts of public administration. In its place, Moore offers an interpretation in which managers are more akin to their entrepreneurial counterparts in the private sector. According to this perspective, strategic managers in the public sector are involved in managing downward to ensure the implementation of change, and managing upward to secure support from the authorizing environment and political leaders. Managers are at their most effective when these different elements are aligned. Thus, implementation problems may arise in case of mismatch between the authorizing environment, the endorsement provided by politicians, and the capacity of institutions to deliver change. Building strategic management capacity in the public sector is therefore a precondition for effective implementation.

Public and Patients

The public and patients are another key group of actors. As the clients and beneficiaries of the services under reform, their attitude toward the new policies will be one of the considerations in the minds of politicians promoting change. To the extent that the public supports existing services, public opposition may rule out change as a serious option. Equally, public dissatisfaction with existing arrangements may create unexpected pressures for reforms.

Either way, the influence of the public and patients should not be exaggerated, considering evidence from a number of different systems that these actors are more often than not the “repressed” interests, whose views are rarely articulated strongly in the health policy debate. This applies to developing countries as much as industrial countries. Bennett and colleagues show how, in developing countries, too little effort to inform the community about the rationale
of reforms has led to misunderstanding among those affected by change.\textsuperscript{22}

\textit{Public Sector Health Workers}

Bennett and colleagues also note the influence of public sector health workers in the reform process. In the countries studied, these workers could be powerful opponents of reform, and often the power of public sector unions had to be weakened to overcome opposition. Politicians unwilling to challenge the power of public sector health workers and their trade unions faced formidable obstacles in implementing their policies.\textsuperscript{23} This finding reinforces Pierson’s conclusions about the obstacles encountered in welfare reform in the developed world.

\textit{Structural Interests and Interest Groups}

Beyond these actors, many other structural interests, interest groups, or stakeholders may influence implementation. Their actual role depends on the precise nature of the reforms being pursued and the extent to which their interests are affected. Structural interests in health care who may be systematically advantaged or disadvantaged in the policy process must be distinguished from interest groups who are active on specific issues.

Alford notes that debate about options for change and the ability to implement these options will be affected by the relative influence of three types of structural interests: professional monopolists (in his terms, the dominant interests), corporate rationalizers (the challenging interests), and the community population (the repressed interests).\textsuperscript{24} Echoing the argument of analysts of the use of power, this perspective helps to explain how, in the health care sector, the reform process often resembles “dynamics without change” through the ability of dominant interests to rule certain issues off the agenda or at least to preserve the existing pattern of benefits even in the face of change.

The influence of both structural interests and interest groups varies over time as well as between issues, and politicians constantly weigh the electoral consequences of their actions even if the com-
munity is not well represented in the policymaking process. A thorough analysis of the role of stakeholders is therefore necessary in understanding the influence of different actors in either facilitating or hindering implementation.²⁵

**Process**

The implementation process encompasses the nature of the political system, the relationship between policymakers and those responsible for implementation, and the approach taken to reform.

**Majority Governments versus Coalitions**

Political systems come in many shapes and sizes, but there is an important distinction between systems based on coalitions and those in which the majority party forms the government. In majority government systems, politicians can usually drive through change—and quickly. Coalition governments need to build agreement, which not only slows the implementation process but may also result in limited change. The United Kingdom’s experience in the 1980s and 1990s illustrates the power available to governments with majorities and their ability to introduce changes even in the face of strong opposition (see chapters 7 and 8). The experience of the Netherlands shows that, in systems based on coalitions, reform proceeds in a more measured fashion and may not move forward at all at certain points as coalition partners change and politicians adjust direction. However, the time spent negotiating change in coalitions, by securing the key actors’ commitment, may ease implementation, just as the rapid pace of policy development in majority governments may be followed by implementation difficulties as the direction of change is modified to accommodate the views of stakeholders.

**Federal versus Unitary Systems**

Federal systems share some characteristics of systems based on coalitions, as in the United States, where the separation of powers be-
between the executive and legislature contributed to the defeat of the reforms proposed by the Clinton plan.

Federal systems also illustrate the importance of the relationship between policymakers and the implementers. The division of authority between federal and state governments affects the ability to implement policies determined at the federal level. 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—but may also be a source of innovation and experimentation. In federal systems, for example, federal agencies may pick up and generalize innovation at the state level.

**Extent of Decentralization**

The spread of innovation from state to federal level illustrates the way policy may originate at the bottom of political systems rather than the top. In Sweden, county councils have used their considerable freedom to shape the development of health services to test different approaches to health care reform. Divergences of approach of this kind may result from differences in political control of agencies at different levels or from administrative discretion. Whatever the reason, decentralization is likely to make national policies harder to implement, although the existence of a strong value system may help to promote consistency in approach between decentralized agencies. Again, this is evident in Sweden, where a long-standing political consensus on the role of the state and the provision of public services has helped to ensure a similarity of policy development despite control of the county councils by different parties. Although the precise path of reform has varied regionally, variations have stayed within fairly narrow bounds.

One manifestation of decentralization in the health sector is the role of private sector organizations in the funding and delivery of health services. In some European countries, for example, government’s role is to ensure access and equity by regulating these organizations’ activities and financing their work instead of assuming own-
ership of health care facilities. Where this happens, policymakers cannot exercise control as directly as they can in countries with national health systems. Working with and through a variety of self-governing institutions, policymakers have to seek change through bargaining and negotiation as well as through legislation. In these corporatist systems, since government is but one actor among many, arguments about implementation deficits are particularly evident.27

Tuohy makes a related point comparing the dynamics of health care reform in the United States, Canada, and the United Kingdom.28 She shows that each system has its own logic, based on the relationship between the state and the medical profession and the relative importance of markets, hierarchies, and collegiality as mechanisms of social control. Whereas in the United Kingdom the existence of hierarchical and collegial networks tempered the impact of internal market reforms and preserved considerable autonomy for the medical profession, in the United States the dynamics of market-driven reform led to widespread change, including a decline in the influence of the medical profession as for-profit health plans emerged. Canada experienced greater stability than either the United Kingdom or the United States. The changes that did occur were negotiated and mediated through established arrangements linking Canada’s provincial governments and medical associations and, as in the United Kingdom, maintaining the medical profession’s autonomy.

Approaches to Reform

The approach to reform covers a spectrum ranging from incremental at one extreme to “big bang” at the other.29

Big bang, the term coined to describe the Thatcher Government’s approach to the reform of the United Kingdom National Health Service (NHS), reflected the governing politicians’ conviction that fundamental, systemwide change was needed. A similar approach to reform was taken in New Zealand (see chapter 8, this volume). Big bang is usually associated with majority governments, and incrementalism with coalition governments, although the tendency for change to occur at the margins is well established in all political systems.
Other approaches include bottom-up reform, as in Sweden through the actions of county councils to initiate change, and “reform without reform,” as in the United States where actors within the system have stimulated change in the wake of the failure of the Clinton plan. The relationship between these approaches and the implementation of policy is complex, with some evidence that big bang reform may be more effective than incrementalism in delivering intended change, but with the associated risk that change may be more difficult to sustain after policymakers in key roles move on.

**Pace of Change**

The pace of change is part of the approach to reform. In some circumstances, politicians may move rapidly to introduce new policies; in others, changes may be phased in over a period of time. Pace depends partly on the length of time elected governments have to implement their policies and partly on the way deemed most effective for countering potential opposition. The existence of majority or coalition governments also influences pace. The Netherlands is an example of relatively slow change. The United Kingdom illustrates the opposite, though with a commitment to the progressive extension of reforms annually. The Thatcher Government’s commitment to move quickly was underscored by its rejection of arguments that its policies should be introduced on a pilot basis before widespread implementation.

There is some evidence from the United Kingdom and elsewhere that reforms introduced quickly run into difficulty and may have to be amended in the process of implementation. However, reforms introduced relatively slowly may fail to deliver what is expected or may be assimilated by existing institutions to frustrate the intentions of reformers.

These features of the policy process again lend support to the argument of researchers who maintain that political institutions have an important bearing both on the implementation of policies in individual systems and on differences in policy development between systems. Immergut highlights the existence of veto points in the
political process to explain variations between countries in policy outcomes. In her view, differences in the design of political systems are more important than the power of pressure groups in accounting for the pursuit of policy changes in some systems but not in others. Together with Tuohy’s analysis of the impact of relationships between political institutions and the medical profession on policy outcomes, this analysis underlines the influence of process on implementation. From an implementation perspective, the importance of Immergut’s and Tuohy’s work is in indicating that, while the impact of structural interests in the health sector poses similar challenges in different systems, the way these challenges are resolved depends on the institutional context.

Content

The content of policies, and the attention given to implementation arrangements as part of policy design, constitutes the fourth element of the implementation framework. Content is influenced by specificity of objectives, internal consistency and coherence, institutional capacity to implement change, and arrangements for managing implementation.

Specificity of Objectives

One component of content relates to the specificity of policy objectives. In some cases, implementation follows a broad statement of intent; in others, policymakers set out their intentions in detail. The Clinton plan contained specific goals; the Thatcher reforms resided on a broad statement of intent. One analysis of the Thatcher reforms argues that the emphasis on a broad vision rather than a detailed blueprint was a key part of a novel macroimplementation strategy that contributed to relative success during implementation. By extension, the overly prescriptive approach to the U.S. reforms may have contributed to their failure. Differences in legal traditions affect the degree to which change must be codified in advance. The Anglo-
Saxon permissive approach allows more room for basing reforms on framework legislation than do systems where the detail of change has to be specified at the outset.

**Internal Consistency and Coherence**

Content also encompasses the internal consistency and coherence of policy. Both are related to the detail in which the different components of the proposed reforms are specified and to the relationship of these components to each other within the reform package. These issues are particularly important in systemwide change where the risks of implementation problems are much greater than in change affecting only single institutions or parts of the system. An illustration is the implementation of organizational reforms such as corporatization, where a complex range of factors need to be addressed (see chapter 1, this volume). The incentive environment affecting corporatization indicates that attention needs to be given to decision rights, residual claimant status, market exposure, accountability arrangements, and social functions if reforms are to work as intended. If these elements are not adequately synchronized, problems are likely to arise. Policy coherence may be affected by the bargaining and negotiation processes used in coalition governments, processes that may result in, for example, compromises and inconsistencies.

As an example, in public health care systems, management autonomy needs to be matched by appropriate forms of accountability. Giving hospitals freedom over decisionmaking without accountability may frustrate the achievement of systemwide objectives. Similarly, exposing hospitals to competition without providing explicitly for the discharge of social functions may result in adverse selection. Even if these issues are addressed at the design stage and the “dial settings” are aligned appropriately, implementation deficits may occur if policymakers depart from their plans during implementation or if the context of reform is hostile. In addition, actors whose interests are adversely affected may seek to delay or divert implementation.

Our political economy perspective emphasizes the interaction between the incentive environment and the political processes involved
in health care reform in explaining outcomes, particularly the frequent gap between intentions and results.

**Institutional Capacity to Implement Change**

Judgments about content also need to be informed by an assessment of institutional capacity to deliver the proposed reforms. In this context, capacity refers both to the availability of trained staff and to the provision of infrastructure support such as information systems. These issues are especially important in developing countries where evidence abounds of the dearth of managers and others with the skills needed to implement reform. Capacity building is also an issue in developed countries where policy involves a shift from hospitals managed as budgetary units in bureaucratic hierarchies, to corporatized entities. If the new regime retains the old staff, it may need training and development to handle new responsibilities. All will need training—the employees who deal with purchasing and market regulation as well as the managers of hospitals and other provider units.

**Arrangements for Managing Implementation**

Inasmuch as reforms are often politically driven, resolving all these issues in advance will be unusual. That is one reason implementation arrangements need attention in advance. In particular, significant actors must be told about and won over to the intended reforms. Units dedicated solely to managing the implementation process, unencumbered with other responsibilities, must be formed. Potential resistance to reform may also be overcome if implementation proceeds in stages, with effort focused initially on sites likely to be supportive and to demonstrate success that others will want to emulate. Oiling the wheels of change by allocating additional funds to support implementation and to meet transition costs is another component of reform, especially if it overcomes stakeholder doubts or resistance.

In this context, Moore’s analysis of the role of public sector managers in bringing about strategic change contains some pointers rel-
relevant to health care reform. As Moore notes, these managers work both inside their organizations and outside to ensure support and to negotiate terms of accountability with the authorizing environment. Working within their organizations, managers exert pressure to achieve change but also provide their colleagues with reassurance and support. Instead of following a detailed plan, they work from a general sense of what they are trying to do, improvising and innovating in the process. Managers also judge the pace of change in relation to prospective opposition or support and their organizations’ capacity to respond. Using Mintzberg’s formulation, managers pursue “emergent strategies” that enable change to be crafted and shaped in the light of experience.

Against this background, the analysis by Ferlie and colleagues of the implementation strategy for reforming the United Kingdom’s health service offers a point of reference for discussion. Against a background of sustained political and management commitment over a number of years, the strategy involved:

- Following a broad vision rather than a detailed blueprint at the beginning of the process
- Providing a visible focus of central leadership within the Department of Health, both at the ministerial level and overall project management level, to drive through key changes; using tried and tested external advisers (e.g., Sir Roy Griffiths)
- Creating new intermediate tiers in “greenfield sites” (the Outposts) seen as uncontaminated by the old regional cultures; setting clear targets for intermediary tiers in relating to the fundholder status of trusts and general practitioners (GPs)
- Using a proactive communications policy to “sell” the reforms
- Parachuting key personnel from the center into high-profile localities (e.g., Guy’s Hospital; energizing and using such allies as resources)
- Sponsoring a program of development projects that could quickly be held up as role models nationally; building up coalitions locally and support networks centrally (e.g., first wave trust chairs)
• Identifying and intervening in “receptive” sites (e.g., first wave trusts) before moving on and diffusing the intervention to less receptive contexts

• Establishing early successes (first wave trusts and GP fundholders; forming district and family health services authorities) that helped signal that there was no going back.39

In reality, what Ferlie and colleagues characterize as a “novel macro-implementation strategy” at the time resembled what Ham has described as “policymaking on the hoof,” or the government’s “making it up as it went along.”40 Nevertheless, their observation that this approach appears to have been relatively effective, even allowing for a strong element of retrospective rationalization, indicates how a model of the policy process that goes beyond the simplistic framework of top-down models holds out lessons for countries about to embark on reform. Analysis of other countries’ experiences of the kind summarized in later chapters provides examples of alternative implementation strategies, thereby adding to our understanding of the range of choices available to policymakers.

Effective Implementation

By bringing these different strands together, we can identify a number of factors that affect the implementation process (table 2.1). In interpreting these factors, it is important to avoid falling into the trap of the early rational and linear policy-process models and inferring that implementation will occur smoothly if these conditions are met. The reality is that the process of stakeholder analysis and analysis of financial, technical, and managerial resources is inherently complex and difficult. No recipe for managing political change can guarantee success. Even in the best circumstances, there may be a gap between intention and action, with emergent strategies that are as vulnerable to being blown off course as are detailed blueprints. Table 2.1 should be read with this in mind.
There are similarities between the approach set out in table 2.1 and Reich’s work on health sector reform.\textsuperscript{41} Reich directs our attention to policy content, the actors or players (in his terms) involved, and their stances. He also highlights the importance of analyzing the opportunities and obstacles facing reformers and the strategies available to them for overcoming these obstacles. Another consideration that might be added is the importance of monitoring and evaluating the impact of policy. Monitoring and evaluation contribute to policy learning. They are essential when implementation is viewed as evolution, as we do.

Returning to the beginning of this discussion, we stress that policymaking and implementation must be seen as part of the same

<table>
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<tr>
<th>AREA OF ANALYSIS</th>
<th>PLANNING ACTION</th>
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<tr>
<td>Analyze the ease with which policy change can be implemented.</td>
<td>Analyze, and adjust when possible, conditions for facilitating change (one implementing agency; clear goals, one objective; simple technical features; marginal change; short duration; visible benefits; clear costs).</td>
</tr>
<tr>
<td>Make values underlying policy explicit.</td>
<td>Identify macro- and microlevel values underlying policy decisions. If values conflict with policy, support will have to be mobilized; costs, minimized.</td>
</tr>
<tr>
<td>Do stakeholder analysis.</td>
<td>Review interest groups (and individuals) likely to resist or promote change in policy at national and institutional levels. Plan how to mobilize support by consensus building or rallying coalitions of support.</td>
</tr>
<tr>
<td>Analyze financial, technical, and managerial resources available.</td>
<td>Consider costs and benefits of external funds. Assess “rent-seeking” behavior. Review salary levels, incentives to change behavior; need for training, new information systems, or other resources; inducements and sanctions.</td>
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process. In circumstances of bounded rationality, institutional complexity, and conflict over values, policymakers have no alternative but to adjust course during the implementation process, seeing the delivery of change as an iterative experience in which feedback from earlier initiatives informs subsequent developments. This applies as much to the technical design of policy (e.g., institutional arrangements and payment mechanisms) as to the politics of implementation (e.g., anticipating and overcoming stakeholder opposition). Implementation is more likely to be effective if the inherently messy nature of the policy process is explicitly acknowledged.

Notes


16. Pierson, *Dismantling the Welfare State?*
17. Ibid.


20. Pierson, *Dismantling the Welfare State?*


23. Ibid.


36. Moore, Creating Public Value.


41. Reich, “Applied Political Analysis for Health Policy Reform.”
As evidenced by the studies presented in this volume, many governments around the world are attempting to reform the management of state-owned hospitals, and others are considering such action. The political alliance supporting reform typically unites proponents of fiscal responsibility, who are searching for ways to reduce government deficits, with health sector advocates, who hope that reform will improve the quality of the health care these institutions provide. However, reforms have opponents as well as supporters. Unless hospital organizational reform demonstrably achieves at least a portion of its intended effects, those among the general public who might benefit from those achievements will lose interest in the reform, and opponents of the process will gain control.

The case for hospital organizational reform varies from country to country, but a stylized version of that case might be expressed as follows. Publicly owned and operated hospitals are generating large and growing budget deficits that the government (or a group within the government) has decided it can no longer afford. Privatization of the hospitals, though a possibility, would be politically costly for three reasons. First, the general population would perceive privatization as government’s reneging on its past assurances of free or low-cost health care. Second, many public hospitals serve the entire national health care system in teaching or referral roles, and privatization
might jeopardize this service. Third, privatization would typically be accompanied by firing large numbers of hospital staff, a potent political interest group. A middle course, which governments hope can either avoid these pitfalls or deflect criticism regarding them, is to retain public ownership of the hospital but introduce organizational reforms that induce the hospital to operate more efficiently, while continuing to meet most of its perceived public duties. In this book, this middle course is termed *corporatization* of the hospital.

To succeed, hospital organizational reform needs sustained political support from the general public that is strong enough to resist pressures from interest groups. The political support recipe will vary from situation to situation, but reformers who provide their supporters with information demonstrating the program’s achievements will be more successful at sustaining support than those who do not.1 To ensure the constant flow of information demonstrating the success of reform or to diagnose problems, the reform process should include monitoring and evaluation mechanisms among its core functions. The four politically sensitive aspects of reform highlighted above—financial performance, access to care, fulfillment of public duties other than direct patient care, and personnel management—should be among the dimensions measured by the monitoring and evaluation system.

We do not assume that organizational reform of public hospitals will improve every dimension of their performance. One kind of reform may improve one set of indicators, while another kind may improve a different set. Some kinds of reform may fail to improve any dimension of hospital performance—or may impair performance.

We therefore propose indicators for judging whether hospital organizational reform affects hospital performance and, if it does, for understanding what each dimension of reform contributes to the overall result. Analysts interested in evaluating hospital reform must be able to distinguish between changes in performance due to the reform related to the hospital itself and changes caused by other shifts in the hospital’s environment. They must characterize both the reform itself and the hospital performance that it is supposed to improve. Tracking the management-reform process inside the hos-
hospital is a useful way of learning the most from the reform, in lieu of ideal measures of performance. Therefore, we develop four related sets of indicators. One set describes the hospital’s environment, a second set characterizes the organizational reform intervention, a third set depicts the response by hospital managers to the reform, and the fourth set measures the reform’s impact on hospital performance.

**Corporatization as a Middle Path**

The health sector is not the only sector that has been attempting to improve the management of government-owned firms through organizational reform as an alternative to privatization. *Bureaucrats in Business (B in B)*, a recent World Bank book, considers whether governments can induce state-owned enterprises (SOEs) to improve their efficiency by exposing them to increased competition in their product and factor markets and by weaning them from financial protection via “hard” budgets and other disciplinary controls. These two strategies are also emphasized in Ira Millstein’s recent applications of lessons from corporate governance in the private sector. Both strategies are also likely to be important components of any successful effort to improve the efficiency of state-owned hospitals, especially in countries that have sufficient demand and enough trained medical manpower to sustain a thriving, high-quality private hospital sector.

Competition and financial discipline cannot change hospital performance, however, unless managers have sufficient independence and authority to alter hospital behavior. For other sectors, *B in B* concludes, “[M]any countries do not give SOE managers the power to react to competition with appropriate measures, such as laying-off excess workers, seeking cheaper suppliers, stopping money-losing services or searching for new markets.” Therefore, understanding the progress of any hospital organizational reform effort means observing not only hospital performance (as measured by changes in inputs, processes, outputs, and outcomes) but also the environment.
within which hospital managers make their decisions. *Bureaucrats in Business* identifies as important four aspects of that environment:

- The external economic conditions that determine the demand for the hospital’s services and its supply of important factor inputs (e.g., medical manpower, drugs, equipment)

- The country’s policy regime, which influences the ease with which hospitals can enter or exit a market and many other aspects of doing business

- The type of relationship government has with the hospital managers—Is it an arm’s-length relationship where government keeps its commitments both to reward and to punish? Does it grant autonomy to hospital managers both de jure and, especially, de facto?

- The degree of monitoring by local stakeholders, who exercise “voice” to influence the hospital’s performance.

Like the present volume, *B in B* used case-study methods to evaluate the impact of organizational reforms on a small sample of SOEs. Of the 12 enterprises studied, *B in B* found that only three showed a substantial improvement in total factor productivity after government introduced formal performance contracts for the firms’ managers. Of the companies, six continued their past unproductive performance and “three performed substantially worse under contracts than before.” The authors concluded that the performance contracts had failed primarily because government systematically “reneged on written promises, sometimes every year.”

If we were to apply the conclusions from *Bureaucrats in Business* to the hospital sector of developing countries, we would not advocate corporatization to improve hospital efficiency. However, there are several reasons to avoid such a generalization. First, the *B in B* findings were based on a small sample of firms, none in the health sector. Second, the authors have set aside the arguably more favorable outcome of subjecting managers to performance contracts in China: “[S]ome studies have found that the greater autonomy allowed under
the contracts contributed to an improvement in total factor productivity” in Chinese SOEs. The authors point to the close monitoring by concerned local stakeholders that characterizes China’s “township and village enterprises” as possibly responsible for the much faster growth of this subset of China’s publicly owned enterprises. Furthermore, Millstein reports without elaboration that “a number of countries such as New Zealand, the United Kingdom, Chile, Sweden, and the [Republic of] Korea have tried, with some success, to reform SOEs by introducing internal and external incentives.” And a study of Korean public enterprises reports their generally positive results with performance contracts.

In light of this account of experience in other sectors, do specific institutional and political features of the hospital sector in developing countries militate for or against the success of their hospital organizational reform efforts? On the positive side, public hospitals in some countries are likely to be subject to close monitoring by concerned local stakeholders such as contributed to the success of the Chinese town and village enterprises. On the negative side, governments are likely to find the imposition of hard budget constraints and binding managerial rewards and punishments even more politically difficult in the hospital sector than they have been in other sectors, partly because the public considers that state-owned hospitals serve social functions and should not be subject to the profit-and-loss calculations of private business.

**Recognizing and Protecting the Social Functions**

Organizational reform is likely to change the mix of hospital services, with potential to either improve or worsen hospital performance relative to social objectives. Exposed to competition in its product and factor markets, any SOE will produce more of the products and services for which customers are willing to pay more than their cost of production, and less of those that are less in demand relative to their cost. In the case of an SOE producing electricity or telephone service, which are essentially private goods, the output mix resulting...
from increased responsiveness to market incentives is likely to be socially beneficial.

However, the markets for the products of state-owned hospitals are distorted by two sets of forces that destroy the presumption that changes in service mix resulting from increased competition in those markets will necessarily increase overall welfare. First, third-party payers subsidize the cost of individual services to different degrees that may not reflect the relative social valuation of those services. Second, some of the outputs of a state-owned hospital serve objectives beyond those of the individual patient who receives the services. We refer to these broader objectives as the social functions of the hospital.10

Social functions that a state-owned hospital may pursue include the production of “public goods” and goods with “positive externalities,” which economic theory predicts would be underproduced under perfect competition.11 Examples of public goods include teaching and research, laboratory support to epidemiological surveillance, and health education services to patients and the community, all of which produce or disseminate information. Examples of goods with positive externalities include immunization programs, family planning programs, and treatment of communicable diseases. Free or highly subsidized care at state-owned hospitals serves the additional social function of removing barriers to access by the poorest and of providing a de facto health care safety net for people who lack catastrophic health insurance.12 Sometimes public hospitals support other social programs. For example, Punjabi provincial hospitals house the local offices of Pakistan’s social welfare program.

Millstein suggests that reforms of SOEs are likely to have a greater chance of success when social functions can be transferred “from the enterprise to municipal or central government authorities.”13 As part of hospital organizational reform, it will be useful to attempt to unbundle hospital products into private and social functions, assigning the reorganized hospital the responsibility for producing the private functions and transferring social functions to government authorities. For example, the social welfare offices housed by the Pakistani state-owned hospitals might logically be moved to
other quarters. However, to a greater degree than for SOEs like electrical or telephone utilities, a hospital’s public and private products are often inextricably linked. Thus, although teaching surgery is arguably a social function of a hospital and delivering surgical services to patients a private function, setting up a separate institution to teach but never perform surgery would be difficult and damaging to both the teaching function and care provided.

Because the output of a typical publicly owned hospital is substantially a social function, two implications for the evaluation of hospital organizational reform become evident. On one hand, this feature of hospitals makes management contracts much more difficult to design and monitor. Government supervisors must not only measure the hospital’s total factor productivity (e.g., quality-adjusted patients served per index unit of inputs) but also track the hospital’s performance in granting access to the poor, in serving as a national center of excellence in health care, in controlling infectious disease outbreaks, and the like. On the other hand, the extent to which this public role is a joint one with the hospital’s private role argues a strong case in favor of parallel reforms during privatization of such organizations and suggests that the benchmark for such organizational reforms is not only profitability.

**Research Scope**

The subject of organizational reform has broad applicability in the health sector. It could apply to government-owned clinics, to health insurance functions, to government pharmaceutical supply operations, or even to medical schools. This chapter focuses on the government-owned hospital.

We view the hospital as an organizational unit. Although for some purposes, such as the analysis of the quality of care, the various medical and support services should be separately analyzed, this chapter’s overarching purpose of evaluating the reform process does not permit full treatment of the details involved in evaluating any individual hospital service. Thus, in designing an evaluation, the analyst is
advised to seek technical guidance from local specialists in the specific medical and support services most affected by the specific reform.

Information requirements for routinely monitoring an enterprise, whether private or government-owned, are less demanding than those for evaluating the success of a policy experiment. The framework and indicators presented here are intended primarily for use in evaluating an initial experiment in hospital organizational reform over a limited trial period. After that, the government and public will decide whether—or in what form—the experiment should be generalized to other state-owned hospitals. Since hospital organizational reform is expensive and time-consuming, it will be in the interest of the public to gather more information about the reform process and its impacts than would be necessary or desirable in the context of more routine monitoring. Adapting this framework for use in routine monitoring by hospital managers or by government regulators is a large task, one requiring careful consideration of the specific context and the costs and benefits to users (inside or outside the hospital) of each item of information. This task deserves separate study.15

Although we believe that formal, rigorous evaluation of hospital organizational reform is useful for sustaining political support for the reform process, we do not attempt to marshal evidence in support of this conjecture. Other authors better grounded in political economy may address this issue as the body of accumulated evidence from around the world expands.

**Conceptual Framework**

The framework proposed here can be used to analyze the impact of hospital organizational reform on hospital performance in low- and middle-income countries. The need is not for a complex model of hospital or firm behavior but rather for the simplest possible conceptual framework that highlights the areas where measurement will be most useful and identifies the categories of variables to be measured.

In the tradition of social experimentation and program evaluation, organizational reform can be thought of as an *intervention*...
imposed on the hospital within a certain policy environment in the expectation of a behavioral response by hospital managers and staff, which leads to improved hospital performance. Figure 3.1 presents a conceptual diagram of the presumed causal relationship from the organizational reform intervention through changes in the hospital production process to a response in the form of changed hospital performance. The evaluation of a hospital organizational reform can be broken into four parts, corresponding roughly to the four parts of figure 3.1:

- Taking account of other outside determinants of behavior that constitute part of the reform environment
- Characterizing the organizational reform (intervention)
- Describing the resulting change in hospital behavior (response)
- Measuring the impact of the reform on hospital performance from society’s perspective (impact).

Each of these four parts of the evaluation is necessary to see whether a reform has any effect on hospital performance and why performance is better in some dimensions than in others. Only if policymakers learn these lessons from the reform can they confidently proceed to apply similar reforms to other hospitals.

Environment: Taking Account of Background Determinants of Hospital Behavior

The outcome of hospital reform depends on background or exogenous features of the hospital’s external environment as well as characteristics of the specific intervention. The dividing line between dimensions of the environment and dimensions of the intervention is somewhat arbitrary, because policymakers have great latitude to choose which features of the hospital’s circumstances they will change as part of the organizational reform. Three dimensions of the hospital’s circumstances, though usually excluded from explicit attention in a hospital organization reform effort, need to be
Figure 3.1 Framework for Evaluating Hospital Management Reform

EXTERNAL ENVIRONMENT
- Market environment
- Finance and payment systems
- Government oversight

INTERVENTION
Organizational reform

RESPONSE
Hospital behavior
- Finance
- Marketing
- Human resources
- Procurement
- Business management strategy
- Medical management strategy

IMPACT
Hospital performance
- Technical efficiency
- Allocative efficiency
- Quality
- Equity

Grant decision rights
Expose to markets
Impose residual claimant status
Improve accountability
Define and protect social functions
considered: market environment, finance and payment systems, and government oversight. These dimensions were described in chapter 1 as the “three systemic factors” that jointly determine the hospital’s incentive regime.

*Market environment.* For any level of demand for hospital services in a catchment area, the impact of reform on a specific hospital depends on the market environment. Suppose that managers of the corporatized hospital raise user fees without improving quality of care. The degree to which patients respond to this kind of reform by taking their business elsewhere depends on the proximity, price, and quality of available substitutes. Thus, comparing the impact of price increases on two hospitals without observing each hospital’s position in its own health care market vis-à-vis alternative providers is likely to lead the analyst astray. Part of the data collected on any hospital reform project should be the size of the local catchment area of patients, the total number of outpatient visits and inpatient bed-days demanded of all hospitals in the catchment area, and each reforming hospital’s market share of these totals. Similar care should be taken to record features of supply and demand in the markets for personnel and other inputs.

*Finance and payment systems.* The four options for hospital financing are direct financing from the government budget, contracts between the government or social health insurance agency and the hospital, contracts with private insurers or employers, and direct payment by consumers from their own pockets. In many countries, the government’s most urgent motive for hospital reform is to shift the financing system from the first option toward one or more of the other three alternatives. To the extent that the source of financing shifts to patients’ pockets, the reform shifts not only the cost but also the risk inherent in health care expenditures from the government to private citizens. In exchange for bearing a larger burden of cost and risk, patients who can choose among several hospitals will be able to put market pressure on those hospitals to improve the quality of their services. The net effects of these changes on the welfare of con-
sumers are likely to vary by income class. While bearing a larger share of cost and risk hurts the poor more than the rich, shifting the purchasing power to patients sometimes benefits the poor more than the rich—as in situations where the supposedly “free” medical care is rationed out to individuals with “connections” or those able to make informal side-payments.

The availability of third-party payment mechanisms (including any of the first three types of hospital financing mentioned above) will reduce the sensitivity of demand for care to the price received by the hospital and increase the demand for care at any given hospital fee schedule. Reducing price sensitivity may be a critical element in permitting hospital managers to respond to corporatization by raising user fees on certain services without losing revenue. But, in some cases, third-party payment mechanisms may incorporate preferential arrangements either for or against the corporatized hospital. Thus, information must be gathered on the nature of hospital financing mechanisms that prevail in the market served by a corporatized hospital, including the share of costs financed by each method and any changes occurring in these shares, to fully understand the effect of reform on utilization and revenue.

*Government oversight*. Managers of a state-owned hospital, or indeed any enterprise, are held accountable to several different constituencies for their own performance and for that of the enterprise. As in chapter 1, box 1.1, of this volume, we use the term *governance* to refer to the set of formal and informal *institutions* that collectively determine how and to whom managers and staff are accountable.

Since we are focusing on evaluation of the organizational reform, we must distinguish between aspects of the governance structure that remain constant as part of the reform environment and aspects that are explicitly changed by the reform. Although each organizational reform is distinctive, reforms often make substantial changes in internal reporting mechanisms while holding constant the external government regulatory structure. Therefore, for our purposes, we separate the discussion of governance into two pieces. Here we use the term *government oversight* to refer to the external government
regulatory structure. Later, in discussing intervention, we use the rubric *accountability* to discuss internal reporting mechanisms (including the presence or absence of a board of directors) that organizational reforms often change.

Government oversight could be exercised by a formal government regulatory body charged with hospital regulation or by direct reporting by hospital managers to ministry of health bureaucrats.\(^{17}\) The degree to which hospital managers are accountable to a regulatory board or to government officials affects the success of any organizational reform. Regulatory bodies from line ministries to independent regulatory boards are notorious for often being “captured” by the industry they regulate. Therefore, indicators of the quality of government oversight should include measures of the regulatory bodies’ degree of capture.

**Dimensions of Organizational Reform: Characterizing the Intervention**

If the managers of public sector hospitals could be placed into environments that emulate perfectly competitive product, factor, debt, and asset markets, there would be no need to collect data on hospital performance. Pareto optimal performance would theoretically be guaranteed.\(^{18}\) However, our discussion of corporatization as a middle road between traditional public sector management practices and complete privatization made clear that accurate emulation of a competitive planned market is a difficult-to-attain goal for organizations whose products cannot be cleanly unbundled into private and social components. Such reforms may be undesirable if not done in such a way that the negative aspects of the reform are mitigated. Other imperfections contaminate every country’s market for hospital services but are more severe in low- and middle-income countries. They include monopsonistic factor markets, asymmetrically distributed information, and a large, minimally efficient scale of production (in comparison to the local demand for sophisticated tertiary hospital care). Thus, the analyst should not expect a “good” hospital organizational reform initiative to achieve the highest scores on all five
dimensions of organizational reform listed on the left in figure 3.1 and in box 3.1. The point of measuring these dimensions is to characterize the degree to which the reform process emulates the conditions of a perfectly competitive enterprise in order to understand how much hospital performance can be improved without privatization and at what cost.¹⁹

A caveat merits mention: no matter the fanfare with which policy changes are announced, hospital reform is not always implemented as planned. Whether hospital reform works is likely to depend not only on the formal granting of autonomy in these dimensions but also on whether hospital managers themselves feel autonomous. For example, in the education sector, King and associates have found that educational outcomes are unaffected by the granting of de jure autonomy but improve significantly when school administrators attain actual autonomy.²⁰ Analysts are therefore urged to measure actual autonomy on the five dimensions listed in box 3.1 to characterize organizational reform.

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**Box 3.1 Dimensions of Organizational Reform**

Managerial decision rights with respect to
- Strategic management and the formulation of institutional objectives
- Procurement
- Financial management
- Human resource management
- Administration (clinical and nonclinical)
- Innovation and learning

Market exposure
- *Information asymmetries*. Disclose results of independent monitoring of hospital performance to reduce asymmetry of information between hospital and consumers (in the product market) and between hospital and owners (in the equity market).
• **Product market.** Enable freedom of entry for competing private hospitals.

• **Labor market.** Eliminate or reduce civil service constraints on personnel policies.

**Residual claimant status**

• Impose a hard budget constraint.

• Allow hospital to raise capital by selling shares to, or borrowing from, private investors.

• Subject hospital to bankruptcy laws that limit private and public shareholder risk.

**Accountability of managers and staff**

• Improve voice. On hospital board of directors, include representatives from private nonhospital sector, insurance industry, local community and nongovernmental organizations.

• Require independent audits and publish results in clear, understandable language.

• Require formation of one or more quality-of-care committees to monitor work of all physicians delivering care in hospital.

**Social functions/public goods**

• Identify public and private goods/services in performance contract.

• Unbundle private from public goods and, where possible, transfer public goods to government entities.

• Subsidize or regulate remaining social functions.

**Sources:** Authors’ construction based on Millstein, “The Corporation as an Ownership and Management Structure”; World Bank, *Bureaucrats in Business*; and Shirley, “Performance Contracts.”
Grant decision rights to managers. Managerial autonomy is the most obvious feature of hospital organizational reform. As discussed above, the relationship between the government and hospital managers plays a critical role in all organizational reform efforts. Each reform can be characterized by the magnitude of control shifted from the hierarchy, or supervising agency, to the hospital. Critical decision rights transferred to management may include control over inputs, labor, scope of activities, financial management, clinical and nonclinical administration, strategic management (formulation of institutional objectives), market strategy, and sales.

Expose managers to markets. The third key element of the high-powered incentives sought in these reforms involves the extent to which hospitals earn their revenue in the market instead of relying on direct budget allocation. The question is, “How much of its services does the hospital deliver or sell to earn its own revenue?” Hospital services identified as largely private goods may be deregulated, reducing barriers to entry that might prevent private firms from competing in these markets. Organizational reform can further be characterized by the degree to which it exposes the corporatized hospital to market forces in the input (factor) and equity markets. Entry barriers to the medical or nursing professions, other than professional school tuition or professional qualifications, may be reduced, as might any advantages to employment by the corporatized hospital relative to employment by its private sector competitors. Some reforms (i.e., in New Zealand) have compelled reformed hospitals to obtain investment funds on the same terms as private hospitals.

Impose residual claimant status. Financial discipline is notoriously lax in SOEs of all sorts, and hospitals are no exception. Managers are unlikely to make the best of any autonomy they are granted unless they face a hard budget constraint from their owners. Some reformers have therefore attempted to create “hard” budgets by establishing new and clearer rules that are mutually understood in advance of the budget period for funding deficits and taxing surpluses. Others
have created categories of services or users whose payments are allowed to be kept in the hospital. These types of changes are intended largely to give hospitals residual claims on revenue—to motivate their interest in enhancing efficiency and lowering costs.

*Improve accountability of managers and staff.* The reforms are also characterized by the degree to which accountability for achieving objectives is based on hierarchical supervision of the organization versus rules, regulations, or contracting. As decision rights are delegated to the organization, the government’s ability to assert direct accountability (through the hierarchy) diminishes. Partially, accountability is intended to come from market pressures, seen as generating a non-political, nonarbitrary evaluation of organizational performance, at least its economic performance.21 If the government is a purchaser, accountability will also be pursued via the contracting and monitoring process. Many reform efforts have created supervisory boards to allow for monitoring of hospital and management performance, while still providing for day-to-day autonomy for managers. Some reforms have tried to support the creation of internal accountability by requiring the formation of internal quality-of-care committees in reformed hospitals.

Rules and regulations regarding the hospital operation constitute an alternative form of accountability mechanism. Therefore creating or strengthening such mechanisms is a fourth critical element of organizational reforms that reduce the use of traditional, hierarchical accountability mechanisms.

*Define and protect social functions.* The final critical factor characterizing these organizational reforms is the degree to which “social functions” delivered by the hospital shift from being implicit and unfunded to specified and directly funded.22 As reforms motivate the hospital to focus more closely on financial viability, management will move to decrease output of services that do not at least pay for themselves. The financial bottom line thus undermines the ability to cross-subsidize certain services internally.23 Organizational reforms
must therefore create alternative mechanisms to ensure that previously cross-subsidized services continue to be delivered (via explicit funding, demand-side subsidies, insurance regulation).

Defining such social functions requires a concerted attempt to distinguish hospital services that are purely private goods from those that have a social function and to define and subsidize the hospital’s social functions. To the extent this effort succeeds, the chances of achieving clear improvements in the hospital’s performance are greatly increased. Of course, reasonable people can disagree regarding the degree to which an individual hospital service can be considered a social function. Some would argue that all care for noninfectious disease is a “private good,” because it benefits primarily the recipient, and anyone who does not pay for it can be inexpensively barred from consuming it. Others would counter that treatment of chronic disease among 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 any citizen.

Despite these differences of view, a working consensus may be possible regarding a ranking of hospital services from least to most private. Organizational reform designers may use such a ranking to transfer services agreed to be primarily social functions to government health care services, regulate their production, or compartmentalize them within an administratively separate part of the hospital (thus insulating the rest of the hospital from their production costs).

Useful indicators for characterizing this dimension of the intervention are whether or not the issue of protecting social functions has been addressed and, for each identified social function, the nature and degree of protection implemented.

**Dimensions of Hospital Behavior: Measuring the Response**

*Organizational behavior* can be described as the set of formal and informal administrative rules and procedures for selecting, deploying, and supervising resources in the most efficient way to achieve
institutional objectives. Given the degree of de facto autonomy granted to the organization, the key to successful hospital operations lies in the response of hospital managers to these directed changes. Specifically, response would be measured by investigating whether hospital managers exercise their new independence by experimenting actively and purposefully with innovative policies and practices in the areas of finance, marketing, human resources, procurement, business management strategy, and medical management strategy (box 3.2).

This more active managerial involvement has substantial costs both in managerial time and in the form of occasional managerial errors. A key hypothesis of the organizational reform movement is that the improved efficiency resulting from this experimentation will reap benefits that exceed these costs.

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

**Marketing.** Kaplan and Norton argue that corporate managers have relied too much on traditional financial measures. These measures reveal past accomplishments but cannot foretell the organization’s future directions. Therefore, a balanced evaluation framework has to 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.
Box 3.2 Dimensions of Hospital Behavior

Finance
- Financial statements
- Capital assets
- Profit
- Debt
- Pricing and payment
- Long-term financial management

Marketing
- Customer acquisition
- Customer satisfaction
- Customer retention
- Customer profitability

Human resources
- Employee selection
- Employee retention
- Employee satisfaction
- Employee productivity

Procurement
- Selection of equipment and supplies
- Productivity of equipment and supplies

Business management strategy
- Defining the vision
- Communicating and learning
- Business planning
- Feedback, innovation, and learning

Medical management strategy
- Functional status and well-being
- Physiological and biomedical measurement
- Cost-effectiveness of health care delivery
- Patient satisfaction with care

Heskett and associates assert that various components of customer attitudes and behavior are connected like a chain linked to business performance. Profit and growth are linked to customer loyalty, which results from customer satisfaction. Customer satisfaction is determined by quality and price. For hospitals, customer attitudes will be affected by what they hear from their physicians, 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. Heskett and associates call the whole system the *service-profit chain.* In this service-profit chain of causation, the service value is created by employee productivity, which is derived from employee loyalty. Loyalty is in turn the product of employee satisfaction, which results from the internal quality of work life. The service-profit chain grows in importance as a business becomes more service-oriented since, by nature, hospital services require direct interaction between care providers and their patients. Satisfied employees are more likely than disgruntled employees to give patients good service and to do it more pleasantly, therefore providing utility directly to the customers.

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

Employees forced out of the hospital or otherwise disadvantaged by the reform may oppose the reform for personal reasons. Sometimes reform deprives an individual of opportunities to profit illegally from selling drugs or other public property. In other cases, reform might simply force workers to exert more effort or be present a larger part of the work day. Protecting a well-performing reform from misguided or misleading criticism is one reason for thorough, timely evaluation of organizational reform, using methods described here. To the extent that the evaluation reveals problems in
the reform process that support reform opponents’ claims, 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 and medical and nonmedical supplies. These inputs constitute a large part of factor inputs required for hospital production processes, especially in developing countries where labor is relatively cheap. A cost analysis of hospitals in a group of developing countries by Barnum and Kutzin suggests that the total recurrent cost of drugs and other nonlabor costs ranges from 21 percent (Nigeria) to 78 percent (China).29 A recurrent-capital ratio averaging 0.20 for another group of developing countries highlights the relative size of the nonlabor component of hospital cost. When 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 decision-making process by incorporating the procurement dimension into its evaluation norm.

**Business management strategy.** Hospital management affects all the stages in the hospital production process that influence hospital performance. Kaplan and Norton argue that linking an organization’s long-term strategy with its short-term actions is the key to successful organizational reform.30 As the first step of such strategic management, the senior managers and the hospital board 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, projected patient mix, target communities, and service quality.

The second step is communicating and linking, which refers to dissemination of the mission set by senior managers to every level of the organization to ensure that departmental and individual goals are not limited to short-term financial goals.
is business planning, which consists of setting priorities, based on the organization’s performance goals, among potentially conflicting reform programs so as 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 managing 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.

**Medical 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 in order to achieve better health outcomes, with cost control a secondary but important concern. Indicators of the quality of medical management can include whether or not the work of individual physicians is reviewed by a quality-control committee of their peers and whether or not the hospital is developing and applying a set of recommended “clinical pathways” for specific, frequently encountered sets of presenting conditions. Once clinical pathways have been adopted, the quality of medical management can be judged by the degree to which physicians apply those pathways in their practice.

**Dimensions of Hospital Performance: Measuring the Impact**

The purpose of evaluating hospital corporatization is to determine whether hospital performance improves as a result of the reform process. We propose to value the changes produced by the reform process in four dimensions, which appear at the right in figure 3.1: technical efficiency, allocative efficiency, quality, and equity. To get a good idea of the success or failure of reform and the reasons for those results, we suggest that the analyst examine at least one indicator on each of these dimensions.

The indicators themselves can be classified by the dimension of hospital performance to which they contribute and by the stage of the production process where they are observed. Table 3.1 presents
a conceptual table of this sort. The columns of the table are the four dimensions of hospital performance (figure 3.1, right-hand side). The rows of the table are the three stages of the production process where measurements can be made. In principle, every indicator of hospital performance can be located in a cell in this table. In reality, locating a specific indicator is sometimes somewhat arbitrary, since the distinctions between dimensions or stages are sometimes fuzzy. In the interest of clarity of exposition, we have categorized all of the indicators we have found in the literature or proposed ourselves into one of the 15 cells defined by table 3.1. Appendix 3A reports the complete classification. Here, we define the dimensions in more detail and discuss examples of useful indicators in each dimension.

This section presents the four dimensions of performance introduced on the right side of figure 3.1 as the columns of table 3.1: efficiency (technical and allocative), 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 the side effects of reform that are so detrimental to public well-being as to negate any purported efficiency improvements. Thus, the complete story of the impact of hospital reform can be told only with measures on all four dimensions.

**Technical efficiency.** A production process is technically efficient if it wastes nothing. If a hospital’s existing inputs can be reorganized to produce more output with no more resources, the hospital is not operating efficiently. Alternatively, if the existing flow of outputs
could be maintained with fewer or less costly inputs, the hospital is not efficient. Technical efficiency can thus be measured by any of a list of indices of hospital output per unit of hospital input (table 3.2). In outpatient clinics, patients seen per clinic-hour is a handy measure. In inpatient wards, average length of stay and bed occupancy rate are useful and frequently used measures of technical efficiency.

### Table 3.2 Technical Efficiency Indicators

<table>
<thead>
<tr>
<th>INPUT</th>
<th>PROCESS</th>
<th>FINAL</th>
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<tbody>
<tr>
<td>Monetary inputs</td>
<td>Capacity utilization</td>
<td>Unit cost</td>
</tr>
<tr>
<td>• Total revenue</td>
<td>• Case-mix-adjusted bed utilization (average length of stay, occupancy rate, turnover rate)</td>
<td>• Case-mix-adjusted cost per outpatient visit</td>
</tr>
<tr>
<td>• Total expenditure</td>
<td>• Case-mix-adjusted capacity utilization of [other] medical equipment</td>
<td>• Case-mix-adjusted cost of surgical intervention</td>
</tr>
<tr>
<td>• Expenditures on staff and drugs</td>
<td>• Outpatient visits per physician per day</td>
<td>• Case-mix-adjusted cost per inpatient case</td>
</tr>
<tr>
<td>Physical inputs</td>
<td>Labor productivity</td>
<td></td>
</tr>
<tr>
<td>• Medical staff (number of qualified medical staff, percentage absenteeism of medical staff)</td>
<td>• Inpatient cases per physician per day</td>
<td></td>
</tr>
<tr>
<td>• Availability and state of medical equipment and supplies (percentage of essentials available and usable)</td>
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<td></td>
<td></td>
<td>• Case-mix-adjusted cost per inpatient case</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service mix</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Total hospital compensation (R)</td>
<td>• Marginal cost (MC)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ri / Rj = MCI / MCj</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(see Appendix 3A)</td>
<td></td>
</tr>
<tr>
<td>Health outcome</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Perinatal mortality rate</td>
<td>• Case fatality rate</td>
<td></td>
</tr>
</tbody>
</table>
| Note: To provide guidance to evaluators under time or budget constraints, the bold type flags indicators that are more difficult or expensive to collect, while the easier-to-collect indicators appear in roman type. We refer to these indicators, respectively, as comprehensive and rapid. As implied by these designations, we believe that the quality of an evaluation will suffer if only rapid indicators are collected.
In principle, these measures of technical efficiency apply only if the quality of the output (e.g., health outcomes, consumer satisfaction) is held constant. To the extent technical efficiency in units of quality-adjusted outputs can be measured, the quality dimension of hospital performance would not need separate attention but could be subsumed within technical efficiency. However, because the measurement of “quality-adjusted” output is in fact quite difficult, we follow the practice of other authors and separate quality into a second dimension.

**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.

Earlier we said that society views some hospital services as social functions that deserve protection from marketplace forces. Measuring the allocative efficiency dimension of hospital performance requires identifying which hospital services provide more social functions than others (table 3.3). 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 function and other services over time. If the hospital’s production of social functions slips 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 patients pay 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 hospital’s 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.

The second pervasive feature of markets for hospital care is asymmetric information between patient and provider. The fact that the patient knows so much less about medical care than the provider, exacerbated by the infrequency with which most patients purchase hospital care, makes the patient incapable of judging the clinical dimension of the quality of the care received. The problem of asymmetric information produces allocative inefficiency, which can be

### Table 3.3 Allocative Efficiency Indicators

<table>
<thead>
<tr>
<th>INPUT</th>
<th>PROCESS</th>
<th>FINAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical input mix</td>
<td>Internal rationing mechanism</td>
<td>Fees, copayments, and other incentives used to:</td>
</tr>
<tr>
<td>• Physician/nonphysicial</td>
<td>• Price mechanism</td>
<td>• Limit moral hazard with respect to nonsocial functions</td>
</tr>
<tr>
<td>medical staff</td>
<td>• Nonprice mechanism</td>
<td>• Limit excess demand</td>
</tr>
<tr>
<td>• Staff/medical supplies</td>
<td></td>
<td>• Limit bypassing of PHF</td>
</tr>
<tr>
<td>Input price ratio</td>
<td></td>
<td>• Encourage use of social functions.</td>
</tr>
<tr>
<td>• Wage of physician/nonphysician</td>
<td></td>
<td>Reward to provider used to:</td>
</tr>
<tr>
<td>medical staff</td>
<td></td>
<td>• Improve quality of care</td>
</tr>
<tr>
<td>• Wage of physician in</td>
<td></td>
<td>• Encourage production of social function.</td>
</tr>
<tr>
<td>public sector/private sector</td>
<td></td>
<td>Service mix</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fees out of pocket (P)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total hospital compensation (R)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pi / Pj &lt; Rj / Rj</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(see Appendix 3A)</td>
</tr>
</tbody>
</table>

**Number of patients bypassing primary health care**

PHF, Primary health facility.

*Note: See table 3.2.*
remedied by a combination of regulating providers and disclosing information about quality to the public.

Gauging allocative efficiency in earlier stages of the production process is even more difficult than judging it at the final product stage. Harris pioneered the development of techniques to analyze the internal allocation of resources in hospitals, techniques that could be used to examine the impact of hospital reform on internal allocation.\textsuperscript{35} One allocation issue facing developing countries is what internal mechanisms need to be developed to eradicate the widespread practice of requesting side payments from patients for inputs like sheets or soap. Collecting almost any data on these internal allocation processes would be useful to track what happens to them during the reform process.

At the input stage of the production process, the most important issue relating to allocative efficiency is the relative compensation received by different categories of personnel. Data on wages paid by the hospital before and after reform must be collected and compared 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.

Quality. Because of information asymmetry, tracking its impact on the quality of care is an essential aspect of measuring the impact of organizational reform. 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. To avoid these debates, table 3.4 suggests indicators of quality at all three stages of production. The analyst is free to select measures from this menu, keeping in mind that measures of quality at the final stage of production will be more compelling to policymakers or to the public than measures taken from earlier stages.

The simple availability of specific drugs has been used as an index of the quality of care in rural primary health care facilities.\textsuperscript{36} Since it
cannot capture how effectively drugs are used when they are available, this index is imperfect. In the absence of other measures, however, knowing that some facilities have basic drugs in stock, while others do not, is informative. Drug availability is one possible index of quality at the input stage of the health care production process. In the hospital context, such input-stage indexes 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. In a more difficult but more revealing measure of process quality, an expert physician would observe patient treatment and judge the adequacy of treatment protocols. Holland and other authors have emphasized comparison of treatment procedures to accepted standards for quality care.

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. Abedian and other authors

<table>
<thead>
<tr>
<th>Table 3.4 Quality Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INPUT</strong></td>
</tr>
<tr>
<td>Number of qualified medical staff</td>
</tr>
<tr>
<td>Availability and state of medical equipment (percentage of essentials available and usable)</td>
</tr>
<tr>
<td>Availability and state of medical supplies (percentage of essentials available and usable)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Note: See table 3.2.
have stressed the importance of meeting customers’ requirements as a component of high-quality health care. Client satisfaction can be measured with exit surveys, which can also be used to reveal the true cost to the patient of hospital care—including side payments.

**Equity.** In a recent review of evidence from case studies of hospital autonomy in five developing countries, Govindaraj and Chawla found that, despite some measurable improvements in technical efficiency, “equity and access issues have either worsened or not improve[ed] after autonomy.” Thus, measuring the degree to which reform affects access of the poor to hospital care is a principal task of any evaluation of hospital reform results.

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. 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 to see the distribution of the quality index by the patient’s income class (table 3.5). For example, are drugs less available to poorer patients than prior to the reform? Or are poorer patients less satisfied with their care?

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. Although 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 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 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 designed primarily to measure patient satisfaction can also capture the effect of reform on the net price to the patient and thus allow inferences about the true impact of the reform on prices paid by the poor. The key issue is the extent to which the reform exposes lower income groups to an increasing financial burden of illness.

**Trade-offs between the Dimensions**

The fact that hospital reform can be evaluated only 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, efficiency improves while equity worsens (table 3.6)?

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 fewer of the observed costs. Collecting data on every stage of the production process in all these dimensions may give health sector decisionmakers the information they need to answer this question, or will at least suggest alterations in reform design that may achieve the desired gains with fewer offsetting performance reductions. In the last analysis, the policymakers themselves must decide, with input from all the appropriate constituencies, which combination of performance goals for public hospitals best meets the nation’s needs.

### Learning from Hospital Reform Experience

Hospital reorganization is an expensive and time-consuming process. The direct costs of reform consist of the cost of designing, implementing, and monitoring the reform process and the costs of the dislocation that change entails. The choice to reform government hospital management also implies a choice to postpone explo-

### Table 3.6 Hospital Autonomy in Ghana, India, Kenya, and Zimbabwe

<table>
<thead>
<tr>
<th></th>
<th>ADVERSE IMPACT</th>
<th>NO CHANGE</th>
<th>SOME IMPROVEMENT</th>
<th>SUBSTANTIAL IMPROVEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency</td>
<td>n.a.</td>
<td>Zimbabwe,</td>
<td>India,</td>
<td>n.a.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ghana</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of care</td>
<td>n.a.</td>
<td>Kenya,</td>
<td>India,</td>
<td>n.a.</td>
</tr>
<tr>
<td>and public</td>
<td></td>
<td>Zimbabwe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity</td>
<td>Zimbabwe,</td>
<td></td>
<td>India,</td>
<td>n.a.</td>
</tr>
<tr>
<td></td>
<td>Ghana</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

n.a. Not applicable.

Source: Govindaraj and Chawla, Recent Experiences with Hospital Autonomy.
ration of other avenues toward improved hospital efficiency. By choosing not to pursue more direct remedies such as restructuring the government health care bureaucracy or hospital privatization, the government and the public incur a substantial opportunity cost in the form of the forgone benefits from those other approaches. In exchange for these direct and indirect costs, it is imperative that the nation learn as much as possible from the hospital corporatization experience. Those who countenance health care reform without sufficient monitoring and evaluation to guide and draw lessons from the reform process are courting chaos in the “reformed” system and consequent financial and political disasters.

**Experimental Design and Its Alternatives**

Learning is not easy. Hospital reforms often take place in a complex and dynamic environment. Any of many variables in that environment can affect the reform process, for good or ill. To have any hope of learning whether hospital reform is working and, more important, which features of the attempted reform are having positive, and which negative, effects on the reform process, the question that must be answered is, “What would have happened in this hospital if organizational reform had not been instituted?” For this, as many as possible of the outside influences on hospital performance that are not themselves part of the reform process must be “held constant” or “controlled for.”

The rows in table 3.7 represent three different approaches to constructing the *counterfactual*, the story of what would have happened without the reform. The three approaches are not mutually exclusive. Indeed, combining all three tells the most comprehensive and accurate story. The reflexive comparison adopts the implicit assumption that the hospital’s behavior and performance prior to the intervention would have continued unchanged, so that any differences are due to the reform. The control group approach compares behavior and performance among reforming hospitals to behavior among hospitals presumed to be unaffected by the reform, assuming that any observed differences are due to the reform. Randomly assigning
Table 3.7 Methodological Approaches to Assessing Reform’s Effects on Hospital Performance

<table>
<thead>
<tr>
<th>TIMEFRAME OF ANALYSIS</th>
<th>STATIC</th>
<th>DYNAMIC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CROSS-SECTION</td>
<td>RETROSPECTIVE</td>
</tr>
<tr>
<td>Reflexive comparison</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>Compare reforming hospitals to themselves prior to reform.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control group</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>Compare reforming hospitals to nonreforming ones.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statistical control</td>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>Exploit variation in intervention mix among reforming hospitals to control statistically.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Cell A is empty by definition.
Source: Authors’ construction.

individual hospitals to the control or intervention group is the most powerful way to designate the control group, and the results will be most convincing to policymakers.

When the detailed nature of the reform (as described by the five dimensions at the left in figure 3.1) differs from hospital to hospital, this variation can be statistically analyzed to estimate the effect of each dimension of reform on measures of behavior and performance. This statistical approach relies on the assumption that measures of the most influential reform characteristics and of the exogenous environment are included in the available data or can be gathered using the survey instruments discussed below. Provided that these measures are available, such analysis is a useful supplement to either of the other two approaches.

The columns in table 3.7 represent the three possible timeframes for analysis. Once more, the three possibilities are not mutually exclusive. Indeed, the most powerful analysis can be performed by combining all three, by collecting data on several hospitals that describe intervention, results, and performance in the past and prospectively as the intervention is implemented.
Cross-section analysis. One way to control for outside influences is to observe at least two hospitals, one that has gone through reform and one that has not. This technique is of most use if, except for the reform process, the two hospitals are as much alike as possible. For example, they might both be government-owned facilities with similar patient populations, similar medical staff, similar local monitoring, and similar exposure to competition from the private sector, and therefore similar demand for their services. Given sufficient similarity on such gross characteristics, the performance of the two hospitals can then be compared, using any of the measures listed above, and the observed differences can be attributed to the organizational reform process.

This cross-section approach to analyzing the impact of reform is most effective if the analyst can form two groups, one of hospitals that have undergone reform and another of those that have not. In this way, the idiosyncrasies of any individual hospital are less likely to dominate the findings, and the true impact of the reform is most likely to emerge by inference.

Retrospective measurement. One disadvantage of the cross-section approach is that the current differences between hospitals that have reformed and those that have not may have existed prior to the reform process. By restricting data gathering to the current period, after the reforms have been launched or are complete, the analyst runs the danger of misinterpreting association as causation. For example, if the reformed hospitals have lower morbidity rates among newborn babies than do the nonreformed hospitals, it is tempting to conclude that the organizational reform lowered these morbidity rates, when in fact the rates may have differed even before the reform. This would be the case if the government had decided which hospitals to reform on the basis of indicators of health care quality, allowing only the higher quality hospitals to undergo corporatization.

Gathering retrospective data on each of the reforming and the nonreforming hospitals is a relatively low-cost remedy for this defect of the cross-section approach. If enough such data are avail-
able and of reasonable reliability, the analyst will be able to distinguish between pre- and postreform differences between the two groups of hospitals. Such a distinction enables the analyst to argue more persuasively that a current observed difference is due to the reform rather than to a preexisting difference between the groups of hospitals.

Prospective measurement with control: the ideal. Unfortunately, retrospective data are not usually adequate to capture every feature of hospital performance or every feature of the hospital's environment that would allow solid analysis of the hospital reform's impact. In fact, the absence of strong data management is sometimes cited as one of the reasons to undertake hospital reform. The alternative is to collect high-quality, comparable data prospectively on two groups of hospitals, some that will reform and some that will not.

Prospective data collection by itself does not, however, suffice to dramatically improve the persuasiveness of any lessons learned from the analysis of a country's hospital reform. To evaluate all of the important aspects of the organizational reform, first, enough data on the right indicators have to be collected. We argue that four groups of indicators are necessary on the four parts of figure 3.1 (environment, intervention, response, and impact). But it is impossible to collect data on every aspect of hospital performance. Some variables are expensive to collect; for example, outcome data that require large samples and lengthy patient monitoring after a hospital visit. And some data are simply unobservable, for example, the political forces that determine how hard a hospital's budget constraint is. The most rigorous approach to controlling properly for all these other sources of variation in hospital performance is to employ randomized trial techniques, which are well known to the medical research community but infrequently applied to health care reform. Hospitals eligible to undergo corporatization should be randomly assigned (by random drawing or lottery), either to a group that will be subjected to reform and intensive monitoring or to a control group that will only be monitored.
Combining random assignment of hospital reform with prospective data collection offers the best chance of learning exactly why hospital reform works out as it does in the hospitals within a health system. However, in some national contexts, prospective data collection and random assignment are sometimes unfeasible. Even in instances where less rigorous study design leaves uncertainty about some of the conclusions, it will always be better for a country to learn as much as possible from its reform effort. Since analytical time and resources for data collection are expensive, many governments must be satisfied with less rigor, in the interest of learning as much as possible right away.

The case studies in this book all represent compromises between the desire for the maximum possible rigor and the exigencies of the actual data and reform situation in specific countries. The authors point out the uncertainties that are due to inadequate data and research design. Based on these results, each reader can decide whether, in a few countries over the coming years, investing the substantial resources required for more rigorous studies, such as prospective randomized controlled trials, might be worthwhile.

**Alternative Measurement Instruments**

When a set of indicators is defined based on what has to be measured, the analyst has to decide on the method to collect the data. The selection of an appropriate measurement instrument may be based on time, cost, and the degree of comprehensiveness associated with each alternative. In general, however, each instrument presents advantages and disadvantages, and usually trade-offs among the above selection criteria. Therefore, the analyst must identify priorities and assess which instruments best reflect them.

*Regular information systems.* We use the term *regular information system* to refer to information routinely and regularly gathered by health sector or hospital personnel. The information is likely to be facility- or personnel-based quantitative data and used mainly to monitor
inputs and outputs. The analyst can use these data to produce statistical indicators (e.g., the number of admissions by demographic group) or combine them to estimate composite indicators (e.g., average length of stay). Collecting such basic data is relatively inexpensive and fast. However, this type of information is unlikely to support the analysis of causal relationships between organizational reform and hospital performance that are the goal of evaluation studies.

Surveys. Surveys gather data less frequently than do the regular information systems, but they typically gather more useful data. Sometimes a survey or a survey component can be fashioned to respond to the needs of the evaluation exercise. One of the easiest forms a survey can take is a simple checklist. This type of questionnaire is relatively quick and easy to design, administer, and process. It is also convenient and timely when the focus of analysis is presence or absence of particular inputs and outputs. However, checklists are not the best way to gather qualitative data or to gather quantitative numerical data.

A formal survey is a more costly and time-consuming alternative. It can be quantitative or qualitative and can focus on diverse issues, including financial, quality, and health status issues. Though more complicated to construct, apply, and interpret than the other two alternatives, a formal survey is more useful for evaluation, because it provides more detailed measures of many critical indicators, especially on outputs and outcomes. Surveys also help attribute any observed changes in performance to specific policy innovations.

For several years, health facility surveys have been included among the community surveys administered as part of the Living Standards Measurement Survey program in the World Bank’s Development Research Group. Since these surveys were intended to gather community-level data necessary to understand household consumption and health-seeking behavior, not to track the organizational reform of hospitals, they are not ideal for the present purposes. Nevertheless, they form a good starting point for constructing a practical hospital survey. Two of the surveys available from the Living Standards Measurement Survey unit of the Bank are the Health

As can be seen in table 3.8, the questionnaires include many indicators of hospital performance that focus on inputs and are therefore relatively easy to collect, but fewer that capture the process or the output stage of production. In developing survey instruments for a specific evaluation exercise, the analyst may build on these examples by adding questions to capture selected outcome indicators, creating additional sections devoted to other performance dimensions such as equity and organizational performance, and perhaps deleting questions that collect duplicate information.

There is a relationship between the type of data collected and the timeframe of the analysis discussed above. Retrospective measurement is often limited to the use of the regular information systems, because such data are often the last resort of an evaluation conducted after the change of interest has taken place. In contrast, the prospective measurement approach affords a chance to design and administer special purpose surveys to capture the specific changes that the reform is supposed to produce.

### Table 3.8 Performance Dimensions by Stage of Production Process, Two Sample Surveys

<table>
<thead>
<tr>
<th>Stages of hospital production process</th>
<th>Inputs</th>
<th>Technological Efficiency</th>
<th>Allocative Efficiency</th>
<th>Quality</th>
<th>Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I, III, IV-1, V, VI, VII-1, VII-2, VIII A, B, D, E, F</td>
<td>I, III, IV-1, D</td>
<td>I, III, IV-1, VII-2, VIII A, B, D, E, F</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Processes</td>
<td>A, C</td>
<td></td>
<td></td>
<td>IX-1, IX-2, A, F, G, H, I, J</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outputs and outcomes</td>
<td>C I, II-1, III, V, VII-1, VIII, IX C, F</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Numbers in the table denote sections and charts (or question numbers) in Survey 1. Letters denote sections of Survey 2.
Use of existing population-based information. Evaluations of hospital reform will often benefit from the use of preexisting, population-based data sources available from official or unofficial institutional sources. Because this type of information is unlikely to focus on hospital organizational reform issues, it cannot substitute for more direct measures of intervention, response, and performance. However, the analyst may need to turn to such information, especially in calculating the indicators of utilization rates by socioeconomic group that determine the equity with which hospital services are provided.

Recommendations and Conclusions

The evaluation framework proposed here could be used to judge whether hospital organizational reform affects hospital performance and, if so, to understand each reform dimension’s contribution to the overall result.

Because hospital organizational reform is a complex procedure applied to a complex organization, understanding how and why any reform succeeds or fails will always present a challenge. The most useful evaluations will have two characteristics:

- They will gather and analyze data on reforming hospitals that track over time changes in the hospitals’ environment, the nature of the reform, the managerial response to the reform, and the associated changes in hospital performance.

- They will gather data on matched hospitals that are not simultaneously undergoing the same reform.

Evaluations that do either of these without the other might be useful. However, they will be subject to criticism by policymakers as well as by other health systems researchers who will argue that the observed associations between reform and performance are due to coincidence and do not reflect a causal relationship from one to the other.
For completeness and to offer a large number of options, we have included several ways to measure each of 18 relevant dimensions, where in many cases 1 or 2 would suffice. But even collecting data on only a fraction of the variables suggested would be expensive and time-consuming, especially in developing countries where statistical services may be weak or overburdened. Furthermore, national governments may be reluctant to invest in such data-collection efforts, especially since a substantial part of the benefits of any lessons learned would accrue to the international community beyond the borders of the country collecting the data. These are arguments for bilateral and multilateral donors to bear a portion, perhaps a large portion, of the cost of such evaluations. Unless such evaluations are performed, however, the questions raised at the beginning of this chapter regarding the link between various possible reforms and social benefits will remain shrouded in mystery.

Notes


5. Ibid., p. 7.

6. Ibid., p. 130.


11. The established criteria for a private good are rivalry and excludability. Hospital-based health care treatment is typically both *rivalrous* (treatment consumed by one patient is not available to another) and *excludable* (treatment can be inexpensively denied to patients who do not pay for it) and therefore qualifies as a pure private good. However, treatment of infectious diseases, though a private good, fulfills a social as well as a private function because of the positive externalities or “spillover effects” on people who would have caught the disease from the untreated patient.

12. The hospital’s availability to provide care for catastrophic illness or injury in a poor country can be considered a second-best remedy for failure in the insurance market, which could be viewed as a social function of the hospital. D. Filmer, J. Hammer, and L. Pritchett, *Health Policy in Poor Countries: Weak Links in the Chain*, Policy Research Working Paper 1874, World Bank, Development


15. For a discussion of the importance of routine monitoring to improving the management of the public sector, with examples from Australia, Canada, Chile, Indonesia, and Zimbabwe, see K. Mackay, ed., “Public Sector Performance—The Critical Role of Evaluation” (selected proceedings from a seminar on the experience in developing national evaluation systems, World Bank Operations Evaluation Department, Washington, D.C., April 1998). Appendix 3B lists World Bank projects that include hospital reform components. The project documents for several of these projects include proposals for monitoring the hospital reform process supported by the project.

16. Readers acquainted with the economics of industrial organization will hear an echo of the classic “structure, conduct, performance” paradigm.

17. Mead Over was a member of such a regulatory board, the Western Massachusetts Health Planning Council, from 1978 to 1981.

18. The welfare theorems of neoclassical economics prove that given the conditions of perfect competition, markets will distribute goods and services efficiently such that no one could be made better off without making someone worse off, a situation that is defined as “Pareto optimal.” The consequences of corporatization for the poor would still require monitoring. See, for example, D. Salvatore, Microeconomics: Theory and Applications (New York: Macmillan, 1986).
19. See chap. 1, this volume, and Girishankar, “Reforming Institutions for Service Delivery,” for detailed taxonomies of health care services on the dimensions of “contestability,” “measurability,” and “information asymmetry.” This taxonomy helps in the design of a reform to predict which services are likely to be more efficiently provided in a market and in which hierarchical system.


21. Ibid., p. 117.

22. By social functions, we mean services or products delivered to recipients at a price less than cost—either for distributional purposes or due to externalities in consumption.

23. This movement away from internal, implicit cross-subsidization is often an explicit objective of organizational reforms in other sectors. Some scholars, notably M. Pauly, believe it should also in health services. See M. Pauly, “Health Systems Ownership: Can Regulation Preserve Community Benefits,” Frontiers of Health Services Management 12 (3): 3–34 (spring 1996).


28. Ibid.


32. Clinical pathways, along 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. The evaluation of disease management approaches is discussed in L. Reeder, “Anatomy of Disease Management Program,” Nursing Management 30 (4): 41–45 (1999); and in D. J. Hunter and G. Fairfield, “Disease Management (Managed Care, Part 3),” British Medical Journal 314 (7099): 50–53 (1997).

33. In the analysis of technical efficiency outside the health sector, the qualifier “at constant quality” would be added to each of the previous two sentences. Because of the importance and difficulty of measuring the quality of health care, we treat it as a separate dimension of performance, discussed below.
34. For proponents of this view, see R. Evans, *Strained Mercy: The Economics of Canadian Health Care* (Toronto: Butterworths, 1984); and W. De Geyndt, *Managing the Quality of Health Care in Developing Countries*, World Bank Technical Paper 258, Washington, D.C., 1995. De Geyndt expresses concern that there is too much emphasis on efficiency at the expense of quality, and asserts, to the contrary, that “[i]mproving quality would also improve efficiency. There are growing concerns with the inefficiency of providing medical care of doubtful efficacy.” Emphasizing that low-quality care leads to complaints, bad reputation, lost referrals, legal procedures, and loss of staff morale, all of which harm efficiency, similar concerns are expressed by J. Ovretveit, *Health Service Quality: An Introduction to Methods for Health Services* (London: Blackwell Science, 1992).


39. R. Evans, *Strained Mercy*.

41. R. Govindaraj and M. Chawla, Recent Experiences with Hospital Autonomy in Developing Countries—What Can We Learn? Data for Decision Making Project, Department of Population and International Health, Harvard School of Public Health, Boston, Mass., 1996.

42. A fall in the percentage of poor patients may not be worrisome provided that the number of poor patients stays the same or increases.

43. Govindaraj and Chawla, Recent Experiences with Hospital Autonomy,” p. 19.

44. The health facility of the Jamaican Survey of Living Conditions was designed by Bank staff Paul Glewwe and Margaret Grosh in collaboration with the Jamaican statistical authorities.

### Appendix 3A. Selected Indicators

#### 1. Organizational Reform

<table>
<thead>
<tr>
<th>DIMENSION</th>
<th>INDICATOR</th>
<th>POSSIBLE VALUES OF INDICATORS</th>
<th>LITERATURE</th>
<th>EMPIRICAL APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Decision rights</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategic management</td>
<td>Defining institutional objectives and targets</td>
<td>A Defined by law or higher authority</td>
<td>Chawla, Govindaraj, Berman, and Needleman (1996)</td>
<td>Chawla, Govindaraj, Berman, and Needleman (1996)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C No limits</td>
<td>Duncan, Ginter and Swayne (1998)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Defining quantity of equipment and supplies, choice of suppliers</td>
<td>A Defined by law or higher authority</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B Several models for local choice</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>C No limits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td>Government transfer as percentage of hospital spending</td>
<td>Actual value (high/low)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Percentage of hospital spending explicitly earmarked by higher authorities</td>
<td>Actual value (high/low)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Range of prices hospital managers are allowed to choose</td>
<td>A No choice or narrow range</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>B Moderate range</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>C No limits</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Human resources</strong></td>
<td><strong>Market exposure</strong></td>
<td><strong>Residual claimant status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------------</td>
<td>-----------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Contracts</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of models allowed</td>
<td>A None or one</td>
<td>B Several specified</td>
<td>C No limits</td>
<td></td>
</tr>
<tr>
<td><strong>Salaries</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choice of salary range</td>
<td>A Defined by law or higher authority</td>
<td>B Moderate salary range defined</td>
<td>C No limits</td>
<td></td>
</tr>
<tr>
<td><strong>Contract</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contracting nonpermanent staff</td>
<td>A None or defined by higher authority</td>
<td>B Several models for local choice</td>
<td>C No limits</td>
<td></td>
</tr>
<tr>
<td><strong>Administration</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rules regarding any other management procedures</td>
<td>A Defined by law or higher authority</td>
<td>B Several models for local choice</td>
<td>C No limits</td>
<td></td>
</tr>
</tbody>
</table>

**Market exposure**

- **Information asymmetries**
  - Disclosure rules regarding hospital performance, finance and pricing
    - A None
    - B Several specified
    - C Complete disclosure
    - Chapter 1, this volume

- **Product market (civil service)**
  - Barrier to entry
    - A Strict regulation
  - Hiring and firing of permanent staff
    - A National civil service
    - B Local civil service
    - C None
    - C No civil service

- **Residual claimant status**
  - **Hard budget constraint**
    - Budget guidelines
      - A Direct income from higher authority
      - B Some discretion at local level
      - C Profit/loss retained at hospital
      - Chapter 1, this volume
  - **Capital raising**
    - Rules regarding debt and equity market operations
      - A Strictly regulated
      - B Moderately regulated
      - C None
  - **Bankruptcy laws**
    - Limit of financial risks to private and public shareholders
      - A None
      - B Some legal measures
      - C Guaranteed by law

(Table continues on the following page)
1. Organizational Reform (continued)

<table>
<thead>
<tr>
<th>DIMENSION</th>
<th>INDICATOR</th>
<th>POSSIBLE VALUES OF INDICATORS</th>
<th>LITERATURE</th>
<th>EMPIRICAL APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Accountability to stakeholders</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voice</td>
<td>Size, number, composition, and role of community participation</td>
<td>A Defined by law or higher authority</td>
<td>B Several models for local choice</td>
<td>C No limits</td>
</tr>
<tr>
<td>Independent audit</td>
<td>Requirement of independent audit</td>
<td>A None</td>
<td>B Required for several hospital functions</td>
<td>C Required for all hospital functions</td>
</tr>
<tr>
<td><strong>Social functions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identification of public goods</td>
<td>Performance contract</td>
<td>A Private and public goods/services not defined</td>
<td>B Private and public goods/services defined</td>
<td></td>
</tr>
<tr>
<td>Unbundling</td>
<td>Performance contract</td>
<td>A Public goods/services not transferred to government entities</td>
<td>B Public goods/services transferred to government entities</td>
<td></td>
</tr>
<tr>
<td>Subsidy and regulation</td>
<td>Performance contract</td>
<td>A Subsidy and/or regulation not provided for remaining social functions</td>
<td>B Subsidy and/or regulation provided for remaining social functions</td>
<td></td>
</tr>
</tbody>
</table>
## 2. Hospital Management

<table>
<thead>
<tr>
<th>DIMENSION</th>
<th>INDICATOR</th>
<th>POSSIBLE VALUES OF INDICATORS</th>
<th>LITERATURE</th>
<th>EMPIRICAL APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Finance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial statements</td>
<td>The value of different types of assets and liabilities</td>
<td>A B C</td>
<td>Bradford and Tiscornia (1987); Duncan, Ginter, and Swayne (1998)</td>
<td></td>
</tr>
<tr>
<td>• Assets, liabilities</td>
<td>The value and sources of revenues, including payer mix, deductions, and contractual allowances</td>
<td>A B C</td>
<td>Bradford and Tiscornia (1987)</td>
<td></td>
</tr>
<tr>
<td>• Revenues</td>
<td>The allocation of expenses, including the share of salaries, drugs, depreciation, and interest in the total expense</td>
<td>A B C</td>
<td>Bradford and Tiscornia (1987)</td>
<td></td>
</tr>
<tr>
<td>• Profit</td>
<td>Net operating profit and its trend</td>
<td>A B C</td>
<td>Bradford and Tiscornia (1987)</td>
<td></td>
</tr>
<tr>
<td>Capital assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Hospital plant</td>
<td>Age, condition, and depreciation of hospital plant</td>
<td>A B C</td>
<td>Bradford and Tiscornia (1987)</td>
<td></td>
</tr>
<tr>
<td>• Capital facilities plan</td>
<td>Funding for depreciation</td>
<td>A B C</td>
<td>Bradford and Tiscornia (1987)</td>
<td></td>
</tr>
<tr>
<td>Profit</td>
<td>Customer profitability</td>
<td>A B C</td>
<td>Bradford and Tiscornia (1987)</td>
<td></td>
</tr>
<tr>
<td>• Service/product</td>
<td>Service/product line profitability</td>
<td>A B C</td>
<td>Bradford and Tiscornia (1987)</td>
<td></td>
</tr>
<tr>
<td>• Financial analysis</td>
<td>Historical operations, projected operations, and financing objectives</td>
<td>A B C</td>
<td>Bradford and Tiscornia (1987)</td>
<td></td>
</tr>
<tr>
<td>Pricing and payment</td>
<td>Cost allocation and control</td>
<td>A B C</td>
<td>Bradford and Tiscornia (1987)</td>
<td></td>
</tr>
<tr>
<td>• Pricing</td>
<td>Different costing methods under different payment system</td>
<td>A B C</td>
<td>Bradford and Tiscornia (1987)</td>
<td></td>
</tr>
<tr>
<td>• Costing</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

(Table continues on the following page)
2. Hospital Management (continued)

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Indicator</th>
<th>Possible Values of Indicators</th>
<th>Literature</th>
<th>Empirical Application</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• New technology: The projected amount needed to cover the cost of new equipment as a result of technological advances</td>
<td>A B C</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Contingency reserves: Liquid assets in excess of current requirements that may need to be used for emergency expenditures</td>
<td>A B C</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Customer relation: Frontline employees’ responsibility in responding to customers’ complaints</td>
<td>A B C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer retention</td>
<td>Assisting customer needs to improve services/products</td>
<td>A B C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer profitability</td>
<td>Net profit of a customer and a customer segment</td>
<td>A B C</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employee retention: Training and upgrading of capacity and skill enhancement</td>
<td>A B C</td>
<td>Heskett, Sasser, and Schlesinger (1997)</td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Description</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----</td>
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</tr>
<tr>
<td><strong>Employee satisfaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Incentives</td>
<td>Recognition, rewards, and merit raises</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>• Working environment</td>
<td>Workplace design</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td><strong>Employee productivity</strong></td>
<td>Simple ratio analyses (patients per physician per day, revenue per employee, etc.)</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td><strong>Procurement</strong></td>
<td>Selection of equipment and services</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Selection criteria</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td><strong>Productivity of equipment and supplies</strong></td>
<td>Productivity analysis including capacity utilization</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td><strong>Business management strategy</strong></td>
<td>Defining the vision</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Organization’s mission statement</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td><strong>Communicating and linking</strong></td>
<td>Methods of disseminating mission statement to all levels of employees</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td><strong>Business planning</strong></td>
<td>Allocation of resources based on short-term targets</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td><strong>Feedback, innovation, and learning</strong></td>
<td>Strategy review and learning processes</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td><strong>Medical management strategy</strong></td>
<td>Functional status and well-being</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Use of measuring tools such as SF-36.</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td><strong>Physiological and biomedical measurements</strong></td>
<td>Anatomic, physiologic, pathologic, biochemical, and pathological evaluations of laboratory tests, x-rays, and bedside observations</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td><strong>Cost-effectiveness of health services</strong></td>
<td>Cost analysis of health services in relation to health outcomes</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td><strong>Patient satisfaction with care</strong></td>
<td>Use of patient satisfaction questionnaires</td>
<td>A</td>
<td>B</td>
<td>C</td>
</tr>
</tbody>
</table>

A = Managers are not familiar with the indicator. B = Managers routinely evaluate the indicator. C = Managers take actions according to their evaluation result to improve management.
### 3a. Hospital Performance—Technical Efficiency

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>POSSIBLE VALUES OF INDICATORS</th>
<th>LITERATURE</th>
<th>EMPIRICAL APPLICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monetary inputs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Total revenue</td>
<td>Actual value</td>
<td>Kutzin and McPake (1997)</td>
<td>Nicaragua Health Sector II (1998)</td>
</tr>
<tr>
<td>• Total expenditure</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Expenditures on staff and drugs</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical inputs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Medical staff (number of qualified medical staff, percentage of absenteeism of medical staff)</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Availability and state of medical equipment and supplies (percentage of essentials)</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Process</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Case-mix-adjusted capacity utilization of (other) medical equipment</td>
<td>Actual value</td>
<td>Holland (1983)</td>
<td>Tunisia Hospital Restructuring Project (1991)</td>
</tr>
<tr>
<td>Labor productivity</td>
<td></td>
<td>Lewis, Sulvetta, and La Forgia (1990)</td>
<td>Lebanon Health Sector Rehabilitation Project (1994)</td>
</tr>
<tr>
<td>• Outpatient visits per physician per day</td>
<td>Actual value</td>
<td>Luft (1987)</td>
<td></td>
</tr>
<tr>
<td>• Inpatient cases per physician per day</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ALOS, Average length of stay.

a. See Appendix 3B.
b. Efficient pricing for competitive hospitals. Efficient pricing for monopolistic multiproduct hospitals allows cross-subsidization and therefore obeys more complex pricing rule.
### 3b. Hospital Performance—Allocative Efficiency

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Possible Values of Indicators</th>
<th>Literature</th>
<th>Empirical Application</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical input mix</td>
<td>• Physician/nonphysician medical staff</td>
<td>Actual value</td>
<td>Lewis, Sulvetta, and La Forgia (1990)</td>
</tr>
<tr>
<td></td>
<td>• Staff/medical supplies</td>
<td>Actual value</td>
<td>Barnum and Kutzin (1993)</td>
</tr>
<tr>
<td>Input price ratio</td>
<td>• Wage of physician/nonphysician medical staff</td>
<td>Actual value</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Wage of physician in the public sector/private sector</td>
<td>Actual value</td>
<td></td>
</tr>
<tr>
<td><strong>Process</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal rationing mechanism</td>
<td>• Price mechanism</td>
<td>A Yes. B No.</td>
<td>Harris (1997)</td>
</tr>
<tr>
<td></td>
<td>• Nonprice mechanism</td>
<td>A Yes. B No.</td>
<td></td>
</tr>
<tr>
<td><strong>Final</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fees, copayments and other incentives used to:</td>
<td>• Limit moral hazard with respect to nonsocial functions</td>
<td>Price-cost margin</td>
<td>Barnum and Kutzin (1993)</td>
</tr>
<tr>
<td></td>
<td>• Limit excess demand</td>
<td>A Yes. B No.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Limit bypassing of PHF</td>
<td>A Yes. B No.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Encourage use of social functions</td>
<td>Price-cost margin</td>
<td></td>
</tr>
<tr>
<td>Reward to provider used to:</td>
<td>• Improve quality of care</td>
<td>A Yes. B No.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Encourage production of social function</td>
<td>A Yes. B No.</td>
<td></td>
</tr>
<tr>
<td><strong>Service mix</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Fees out of pocket ($P$)</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Total hospital compensation ($R$)</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• $P_i / P_j &lt; Ri / R_j$</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of patients bypassing primary health care</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PHF, Primary health facility.

a. Variable $i$ is more of a public good or has more positive externality than $j$. 
### 3c. Hospital Efficiency—Quality

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Possible Values of Indicators</th>
<th>Literature</th>
<th>Empirical Application*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Number of qualified medical staff | Actual value | De Geyndt (1995)  
Lebanon Health Sector rehabilitation Project (1994)  
Nicaragua Health Sector II (1998) |
| Availability and state of medical equipment (percentage of available and usable essential medical equipment) | Actual value | Thomason and Edwards (1991)  
Scott and Flood (1987) |                        |
| Availability and state of medical supplies (percentage of available and usable essentials) | Actual value |  |                        |
| **Process** |                               |            |                        |
| Percentage of treatment according to defined protocol | Actual value | ODA (1996) | Tunisia Hospital Restructuring Project (1991) |
| Availability of patient history (percent) | Actual value | Thomason and Edwards (1991)  
| Pattern of administration of drugs (percentage of compliance with defined protocol) | Actual value | De Geyndt (1995) |  |
| **Final** |                               |            |                        |
| Health outcome | De Geyndt (1995)  
Scott and Flood (1987)  
Argentina Provincial Health Sector Development (1996)  
Ecuador Health Service Modernization Project (1998)  
Ghana Health Sector Support Project (1998) |
| Mortality rates adjusted by severity | Actual value |  |                        |

*(Table continues on the following page)*
### 3c. Hospital Efficiency—Quality (continued)

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>POSSIBLE VALUES OF INDICATORS</th>
<th>LITERATURE</th>
<th>EMPIRICAL APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate of adverse outcome for selected severity-adjusted conditions</td>
<td>Actual value</td>
<td></td>
<td>Tunisia Hospital Restructuring Project (1991)</td>
</tr>
<tr>
<td>• Rate of hospital-caused infection (iatrogenic disease)</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Rate of postoperative infection rates</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Rate of emergency readmission within 2 weeks of discharge</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Rate of returning to operating theater for the same condition</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Frequency of changed diagnoses for outpatients</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient satisfaction (health survey questionnaire, quality-of-life measures, etc.)</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corruption</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Number of patients making side payments</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Amount of recognized pilferage of drug supplies</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Number of moonlighting medical staff</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Percentage of nepotism (percentage of closely related staff)</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient satisfaction</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Technical competence</td>
<td>Quantitative/qualitative evaluation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Environment</td>
<td>Quantitative/qualitative evaluation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• People skills</td>
<td>Quantitative/qualitative evaluation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Systems</td>
<td>Quantitative/qualitative evaluation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Amenities</td>
<td>Quantitative/qualitative evaluation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. See Appendix 3B.
### 3d. Hospital Efficiency—Equity

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Possible Values of Indicators</th>
<th>Literature</th>
<th>Empirical Application(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exemption</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government expenditure per patient by socioeconomic index</td>
<td>Actual value</td>
<td>Andersen (1978)</td>
<td>Tunisia Health Sector Loan Project (1998)</td>
</tr>
<tr>
<td>Rationing of services by time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Appointment waiting time</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Office waiting time</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geographical barrier (outreach program)</td>
<td>A Yes. B No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The extent of risk coverage by socioeconomic index</td>
<td>Actual Value</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Process</strong></td>
<td></td>
<td></td>
<td>Ecuador Health Service Modernization Project (1998)</td>
</tr>
<tr>
<td>Use of medical services</td>
<td></td>
<td>Aday and Andersen (1981)</td>
<td></td>
</tr>
<tr>
<td>• Mean physician visit by socioeconomic index</td>
<td>Actual value</td>
<td>Andersen (1978)</td>
<td></td>
</tr>
<tr>
<td>• Mean number of use of selected services by socioeconomic index</td>
<td>Actual value</td>
<td>Aday (1975)</td>
<td></td>
</tr>
<tr>
<td>Use relative to needs by socioeconomic index</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Use-disability ratio</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Symptom response ratio</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The number of insurance claims filed by socioeconomic index</td>
<td>Actual Value</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Table continues on the following page)
### 3d. Hospital Efficiency—Equity (continued)

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>POSSIBLE VALUES OF INDICATORS</th>
<th>LITERATURE</th>
<th>EMPIRICAL APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Final</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of unfulfilled needs by socioeconomic index</td>
<td>Actual value</td>
<td>Andersen (1978)</td>
<td></td>
</tr>
<tr>
<td>Health outcome by socioeconomic index</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial burden index</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• The ratio of out-of-pocket health expenditure to food expenditure by socioeconomic index</td>
<td>Actual value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Poverty gap before and after out-of-pocket health expenditure by socioeconomic index</td>
<td>Actual value</td>
<td>Wagstaff and Watanabe (2000)</td>
<td></td>
</tr>
</tbody>
</table>

a. See Appendix 3B.
Appendix 3B. World Bank Hospital Reform Projects

<table>
<thead>
<tr>
<th>DATE</th>
<th>COUNTRY</th>
<th>PROJECT TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/26/98</td>
<td>Panama</td>
<td>Health Sector Reform Pilot Project</td>
</tr>
<tr>
<td>05/20/98</td>
<td>Ecuador</td>
<td>Health Services Modernization Project</td>
</tr>
<tr>
<td>05/11/98</td>
<td>Nicaragua</td>
<td>Health Sector Modernization Project</td>
</tr>
<tr>
<td>02/13/98</td>
<td>Tunisia</td>
<td>Health Sector Loan Project</td>
</tr>
<tr>
<td>10/21/97</td>
<td>Guinea-Bissau</td>
<td>National Health Development Program Project</td>
</tr>
<tr>
<td>05/16/96</td>
<td>Russian Federation</td>
<td>Medical Equipment Project</td>
</tr>
<tr>
<td>05/09/96</td>
<td>Morocco</td>
<td>Social Priorities Program: Basic Health Project</td>
</tr>
<tr>
<td>02/20/96</td>
<td>India</td>
<td>Second State Health Systems Development Project</td>
</tr>
<tr>
<td>02/06/96</td>
<td>Sierra Leone</td>
<td>Integrated Health Sector Investment Project</td>
</tr>
<tr>
<td>11/07/95</td>
<td>Mozambique</td>
<td>Health Sector Recovery Program Project</td>
</tr>
<tr>
<td>07/05/95</td>
<td>Argentina</td>
<td>Provincial Health Sector Development Project</td>
</tr>
<tr>
<td>01/26/95</td>
<td>Croatia</td>
<td>Health Project</td>
</tr>
<tr>
<td>01/19/95</td>
<td>Estonia</td>
<td>Health Project</td>
</tr>
<tr>
<td>12/01/94</td>
<td>Lebanon</td>
<td>Health Sector Rehabilitation Project</td>
</tr>
<tr>
<td>11/09/94</td>
<td>Venezuela, R.B. de</td>
<td>Health Services Reform Project</td>
</tr>
<tr>
<td>11/08/94</td>
<td>Albania</td>
<td>Health Services Rehabilitation Project</td>
</tr>
<tr>
<td>11/02/94</td>
<td>India</td>
<td>Andhra Pradesh First Referral Health System Project</td>
</tr>
<tr>
<td>09/21/94</td>
<td>China</td>
<td>Comprehensive Maternal and Child Health Project</td>
</tr>
<tr>
<td>11/24/93</td>
<td>Nicaragua</td>
<td>Health Sector Reform Project</td>
</tr>
<tr>
<td>03/01/93</td>
<td>Hungary</td>
<td>Health Services and Management Project</td>
</tr>
<tr>
<td>02/01/93</td>
<td>Jordan</td>
<td>Health Management Project</td>
</tr>
<tr>
<td>06/01/92</td>
<td>Ecuador</td>
<td>Second Social Development: Health and Nutrition Project</td>
</tr>
<tr>
<td>06/01/92</td>
<td>Korea, Rep. of</td>
<td>Public Hospital Modernization Project</td>
</tr>
<tr>
<td>11/01/91</td>
<td>Chile</td>
<td>Technical Assistance and Hospital Rehabilitation Project</td>
</tr>
<tr>
<td>04/30/91</td>
<td>Zimbabwe</td>
<td>Second Family Health Project</td>
</tr>
<tr>
<td>04/24/91</td>
<td>Korea, Rep. of</td>
<td>Health Technology Project</td>
</tr>
<tr>
<td>02/01/91</td>
<td>Tunisia</td>
<td>Hospital Restructuring Support Project</td>
</tr>
<tr>
<td>05/07/90</td>
<td>Yemen, Rep. of</td>
<td>Health Sector Development Project</td>
</tr>
<tr>
<td>03/01/89</td>
<td>Indonesia</td>
<td>Third Health Project</td>
</tr>
<tr>
<td>02/01/89</td>
<td>Mozambique</td>
<td>Health and Nutrition Project</td>
</tr>
<tr>
<td>05/01/84</td>
<td>Brazil</td>
<td>Second Health Project</td>
</tr>
<tr>
<td>11/01/83</td>
<td>India</td>
<td>Third Population Project</td>
</tr>
<tr>
<td>01/01/83</td>
<td>Indonesia</td>
<td>Provincial Health Project</td>
</tr>
<tr>
<td>05/01/81</td>
<td>Tunisia</td>
<td>Health and Population Project</td>
</tr>
<tr>
<td>04/01/71</td>
<td>Trinidad and Tobago</td>
<td>Population Project</td>
</tr>
<tr>
<td>06/01/70</td>
<td>Jamaica</td>
<td>Population Project</td>
</tr>
</tbody>
</table>

*a. These projects have hospital reform components or address hospital-related issues.
Part 2

Cross-Country Views
During the design or implementation phases of reforms, problems can arise. In a number of our country/economy case studies, key design features were altered when difficulties were encountered during implementation. Conversely, poor design contributed to implementation difficulties in some cases. We use the frameworks set out in chapters 1 and 2 as a basis for a preliminary assessment of the success—or otherwise—of the design and implementation of our case studies of marketizing organizational reforms. Table 4.1 develops a fuller framework for evaluating organizational reforms of health care delivery. We do not attempt to make a rigorous evaluation using this framework, but to draw some tentative lessons from the case studies that might be viewed as hypotheses for the further testing of factors that are important for successful reform and as strategies for reducing the risk of implementation failure.

**Diversity in Design**

The case studies are diverse to the extent that the reforms changed the organizational structure, market environment, and funding
Table 4.1  Applying the Conceptual Framework

<table>
<thead>
<tr>
<th>Decision rights</th>
<th>Vertical hierarchy</th>
<th>Indonesia</th>
<th>Tunisia</th>
<th>United Kingdom</th>
<th>New Zealand</th>
<th>Singapore</th>
<th>Malaysia</th>
<th>Management autonomy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident claimant</td>
<td>Public purse</td>
<td>New Zealand</td>
<td>Tunisia</td>
<td>United Kingdom</td>
<td>Hong Kong</td>
<td>Australia</td>
<td>Singapore</td>
<td>Private owner</td>
</tr>
<tr>
<td>Market exposure</td>
<td>Budget allocation</td>
<td>Indonesia</td>
<td>Hong Kong</td>
<td>New Zealand</td>
<td>Malaysia</td>
<td>United Kingdom</td>
<td>Australia</td>
<td>Market revenue</td>
</tr>
<tr>
<td>Accountability</td>
<td>Hierarchical control</td>
<td>Indonesia</td>
<td>Tunisia</td>
<td>United Kingdom</td>
<td>Hong Kong</td>
<td>New Zealand</td>
<td>Malaysia</td>
<td>Regulations and contracts</td>
</tr>
<tr>
<td>Social function</td>
<td>Unfunded mandate</td>
<td>Indonesia</td>
<td>Singapore</td>
<td>Malaysia</td>
<td>Tuneisia</td>
<td>Hong Kong</td>
<td>Australia</td>
<td>New Zealand</td>
</tr>
</tbody>
</table>
arrangements for public hospitals. Table 4.1 attempts to order the cases according to the magnitude of the changes in these areas introduced in practice.

The Singaporean case is the clearest example of reform of all three dimensions: full corporatization, competition, and a shift to output-based financing. Malaysia adopted similar design features, but the case involves only one hospital exposed to limited competition. The state of Victoria (Australia) also used competition and output-based financing. Although it did not fully corporatize, Victoria made extensive use of competitive pressures by introducing private sector participation in hospital investment and management. Victoria also merged hospitals into larger networks to facilitate rationalization within networks.

The reforms in the United Kingdom and New Zealand appeared initially to adopt similar design features—corporatization, competition, and output-based payment—but these policies were not fully implemented in either country. New Zealand corporatized, but the government continued to protect hospitals from the risk of financial failure. In the United Kingdom, the National Health Service (NHS) trusts did not receive the promised financial freedoms, and most staff remuneration remain subject to national regulation. In both cases, policy reversals during implementation limited competition from the outset (although small market size was also a factor in New Zealand), and following recent changes of government, competition has been almost eliminated except in long-stay care. In both countries, the shift to output-based finance was gradual, circumscribed by global budget contracts and undermined by mechanisms for financing hospital operating deficits that sapped incentives for efficiency. In both countries, politicians continued to exercise detailed intervention in some politically sensitive management decisions of autonomous purchasers and corporatized providers in the health sector (a phenomenon also observed in separate research on the changing role of government in a range of South Asian and African case studies1).

The organizational reforms in Hong Kong, Tunisia, and Indonesia were less radical in design: they increased management autonomy to varying degrees but did not corporatize the more radical corpora-
tized model. Competition was not a prominent feature of the policy design. Hong Kong and Tunisia also reformed hospital payments, shifting to global budget agreements or contracts linked to output and other performance dimensions. Indonesia did not reform public sector payment methods but allowed hospitals to earn fees for service from private patients.

**What Counts as Successful Implementation?**

No two case-study countries or economies adopted exactly the same objectives for organizational reform. While all sought to improve technical efficiency, improvements in quality and in staff recruitment and retention appeared to be of greater concern in Tunisia, Singapore, and Malaysia. Hong Kong, New Zealand, the United Kingdom, and the state of Victoria wanted to reduce waiting times for treatment. Indonesia, Malaysia, and Singapore also sought to increase private (and hence total) revenue for corporatized public hospitals by allowing hospitals to levy and retain revenue from patient fees for some types of patients. Victoria wanted to achieve rationalization of excess hospital capacity, and redistribution of capacity to match population need.

This diversity of objectives affects perceptions of success. What has been seen as success in increasing hospital revenue in Indonesia, for example, might well have been considered a failure in Hong Kong, New Zealand, or the United Kingdom, where both cost containment and universal access are high-priority policy objectives—revenues collected through user fees would have a negative impact on access for low-income groups.

We propose three criteria for a tentative ranking of case-study countries/economies against the objectives they set for themselves, based on the assessment offered by our case-study authors:

- **Effectiveness.** Is there evidence that reform achieved some progress in one or more of its major stated objectives without incommensurate costs or trade-offs with other objectives?
• **Staying on track.** Were the reforms implemented as planned or according to plans modified as a result of transparent review or evaluation? Has policy been reversed or is reversal seen as a high risk for the future?

• **Coherence.** Are the changes to the hospital(s) organizational structure congruent with the preexisting external environment? If not, were needed changes in market structure and funding arrangements addressed? Have prerequisite changes been made in other policies and regulations (such as public sector labor regulation)?

As discussed in “A Conceptual Framework for the Organizational Reforms of Hospitals” (chapter 1, this volume), a robust evaluation of this type of reform would require more comparable data and consistent quantitative analysis across a larger sample of reform than is available from our case-study countries/economies. This preliminary grouping of cases into more and less successful categories should therefore be viewed as a starting point, not as an evaluation of a type of reform, for developing hypotheses about what might be critical variables for successful design and implementation, using the conceptual frameworks developed in chapters 1 and 2.

In applying our three criteria to the case studies where reform has been implemented, the absence of any unqualified successes is striking for reasons explored in table 4.2.

**More Successful Cases: Singapore, Hong Kong, Malaysia, Tunisia, the State of Victoria**

The more successful group of cases includes some more radical reforms (Singapore, the state of Victoria), some more cautious reforms with limited objectives (Hong Kong, Tunisia), and one of limited scope (Malaysia).

**Effectiveness.** Singapore and Malaysia met their objective of increasing private (and hence total) revenue in corporatized hospitals but at the expense of cost containment in the system as a whole. Cost containment problems triggered a second phase of reforms in payments
systems. Reforms in Malaysia and Singapore, some critics say, have resulted in some loss of equity. The state of Victoria achieved aggregate cost reductions while increasing throughput—although part of these improvements may be attributed to the previous introduction of DRG-based payment—and also achieved some rationalization of hospital capacity. All of these cases have achieved some improvement on some measures of productivity, although in Malaysia and Singapore whether this amounts to improvement in technical efficiency is not clear. There is some evidence of improvements in quality and in staff retention in Singapore, Hong Kong, Malaysia, and Tunisia. However, these gains have entailed significant increases in salaries in Singapore and Malaysia and an initial investment race in high technology in Singapore.

Staying on track during implementation. Reforms in this group were largely implemented according to plan, although most hospitals had to compromise with staff groups and unions over the transition from the civil service to the corporatized entity. Those compromises increased implementation costs or deferred expected savings. In every

### Table 4.2 Spectrum of Case Studies and Their Market Exposure

<table>
<thead>
<tr>
<th>INPUT-BASED BUDGET</th>
<th>PROSPECTIVE CONTRACTS FOR OUTPUTS</th>
<th>&quot;MONEY FOLLOWS PATIENTS&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monopoly ➔ Increasing competition</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Government budget agency</th>
<th>Indonesia</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomization</td>
<td>H.K.</td>
<td>U.K.</td>
</tr>
<tr>
<td>Corporatization</td>
<td>N.Z.</td>
<td>Singapore</td>
</tr>
<tr>
<td>Nonprofit</td>
<td>Catalonia</td>
<td>N.Z. long-term care</td>
</tr>
<tr>
<td>Privatization</td>
<td>N.Z. long-term care</td>
<td></td>
</tr>
</tbody>
</table>

H.K. = Hong Kong; N.Z. = New Zealand; U.K. = United Kingdom; Victoria = Victoria, Australia.
case, reforms do not appear to be under political threat, although in Tunisia it appears the central Ministry of Health is moving to gradually reassert control over autonomous hospitals.

**Coherence.** In all the more successful cases, either the payment mechanism was reformed to reinforce incentives for efficiency or exposure to competition, or market entry was increased, or both.

**Partial Success: United Kingdom**

The United Kingdom has seen improvements in hospital efficiency, but whether these gains can be primarily attributed to the organizational reforms is not clear.

**Effectiveness.** Efficiency gains were driven in part by hierarchically imposed performance targets. The United Kingdom has also seen some reduction in waiting times for treatment since reform, but the extent to which these gains can be attributed to the organizational reforms is debatable. Patients of fund-holding general practitioners benefited more from reduced waiting times than others, creating equity concerns. In parallel with organizational reform, additional funding has supported national waiting-list initiatives. These reforms have been criticized on the grounds that they may not target the highest-priority patients and may create perverse incentives (e.g., increasing the waiting time for consultations with specialists who put patients on waiting lists).

**Staying on track during implementation.** In the United Kingdom, critical aspects of reform policies were not implemented as planned. Hierarchical mechanisms for monitoring and controlling the NHS were retained, if not strengthened, instead of being replaced with contractual and regulatory levers consonant with market-oriented reforms.

Since a change of government, aspects of reform have been reversed. Policy reversal has been concentrated on reducing the mar-
ket exposure of trusts and in changing purchaser arrangements. Trusts have remained autonomous.

**Coherence.** Market-oriented reforms appear to have been overlaid cautiously and gradually upon prereform hierarchical mechanisms for monitoring and control, without a “clean break” from one paradigm to another. Provider payment mechanisms and exposure to competition changed more gradually than trust autonomy, in part due to limitations of information systems but also due to caution about creating sharp financial pressures for politically controversial structural adjustment.

**Less Successful Cases: New Zealand and Indonesia**

Reforms appear to have made little impact on policy objectives in New Zealand or Indonesia.

**Effectiveness.** Efficiency and quality do not seem to have improved by available measures. New Zealand appears to have returned to trend improvement in some measures of productivity after a slowdown immediately after reform. Waiting time reductions proved difficult to achieve through marketizing organizational reforms and purchaser initiative alone, and have since attracted special national policy initiatives with increased funding. Indonesian hospitals increased private revenue following reform, but none of the hoped-for reduction in government funding materialized.

**Staying on track during implementation.** In both countries, important elements of financing policy reforms were not implemented as planned. In New Zealand, provider payment reform and competition were introduced in a much more limited and gradual way than originally envisaged. In New Zealand, 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. Despite recent policy reversals, New
Zealand public hospitals still have greater management autonomy than their U.K. counterparts.

**Coherence.** Problems in the initial design seem to have compromised Indonesia’s reforms. The designers did not address market environment or funding arrangements, 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 may cut the number of subsidized beds for the poor. New Zealand’s reforms began with a coherent design, but implementation problems introduced inconsistency and conflicts in policy settings.

**Key Features of Cases of More Successful Implementation**

Now we turn to the implementation framework developed in chapter 2 of this volume, drawing on the work of Walt and Gilson,\(^3\) to take stock of the key features of reform implementation across four dimensions: content, context, actors, and process.

**Content**

Table 4.3 attempts to classify the cases according to the extent to which the reforms *in practice* changed the five key elements of organizational structure described in chapter 1. In some instances, the planned design settings differed markedly from those actually implemented.

**Table 4.3** Preliminary Assessment of the Success of Organizational Reforms

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>SINGAPORE</th>
<th>MALAYSIA</th>
<th>VICTORIA, AUSTRALIA</th>
<th>HONG KONG</th>
<th>TUNISIA</th>
<th>UNITED KINGDOM</th>
<th>NEW ZEALAND</th>
<th>INDONESIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>Partial</td>
<td>Partial</td>
<td>Partial</td>
<td>Partial</td>
<td>Partial</td>
<td>Partial</td>
<td>Partial</td>
<td>Partial</td>
</tr>
<tr>
<td>Staying on track</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Partial</td>
<td>Partial</td>
<td>Partial</td>
<td>No</td>
</tr>
<tr>
<td>Coherence</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Partial</td>
<td>Partial</td>
<td>Partial</td>
<td>No</td>
</tr>
</tbody>
</table>
The more successful cases fall into two types of reform design:

- **Coherent market-oriented change.** Singapore and Malaysia corporatized hospitals, and continued or introduced changes in payment arrangements to reward productivity and encourage increased output. In Australia, Victoria used competitive tendering for private sector design, finance, construction, and operation of new hospitals, and private reconstruction and operation of an existing hospital, engendering relatively strong competitive pressures.

- **Incremental management change.** Hong Kong and Tunisia focused on improving internal management of hospitals more than on 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 significant 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. In table 4.3, this inconsistency in dial settings is visible as a wider range on the spectrum for different key determinants for both countries. 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 but without freedom to optimize their input mix and without either accountability or market mechanisms to protect efficiency and equity objectives.

The successful cases generally appear to have built human resource development into the design of reform. Strategies include recruiting experienced directors from outside the health sector, bringing in private sector management through public-private partnerships, training sector managers, and developing performance management systems for staff. This was a major feature of Hong Kong reforms. Human resource development was also part of the United Kingdom
reform strategy. There and in New Zealand, however, experience recruiting management and directors from other sectors appears to have been less successful than in the East Asian cases.

Several case studies illustrate the benefits of allowing flexibility to adapt and develop design settings during implementation as issues emerge. In the United Kingdom, for instance, initial policy was more a broad-brush statement of policy intentions than a detailed blueprint, and reform was implemented in several waves. In Singapore and Malaysia, the decision to begin by piloting change in a single hospital allowed this flexibility. Singapore, Malaysia, and the United Kingdom progressively adapted provider payment mechanisms in response to problems or limitations in the initial approach. Singapore and the United Kingdom found they had to coordinate investment and service development plans so as to avoid duplication, and rationalize or manage capacity. The state of Victoria began with provider payment reforms, and moved on to marketizing organizational reforms as a second phase of reform, to tackle objectives that could not be realized by payment reform alone.

**Context**

In most case-study countries/economies, both more and less successful, hospital organizational reform took place after wider changes in policies regarding the role and management of the public sector. In most cases, corporatization and privatization in other government-owned sectors preceded similar reforms in the health sector. In a number of reform countries, public hospitals came under mounting financial pressure in the period before reform (Tunisia; Hong Kong; Malaysia; Indonesia; New Zealand; Victoria, Australia), often in the context of economic and fiscal crisis. In Tunisia and the Asian cases, hospitals also had difficulties paying adequate salaries to retain health professionals, and the public was dissatisfied with access to public hospital services and their quality. Dissatisfaction created some public constituency, if not a support base, for this type of reform. (Commonly, the public attributed problems in hospitals to underfunding as much as inefficiency.) Most of the more successful reformers were
able to increase investment in the hospital system at the same time as implementing organizational reform (Singapore; Malaysia; Tunisia; and Victoria, Australia).

Four countries/economies that implemented organizational reform relatively successfully did so in hospitals owned by the central government. Reform was facilitated by their tradition of disciplined “top-down” public administration in which managers expect to comply with new national policies. All of them also had strong central government–policy leadership 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). In the state of Victoria, a similar tradition of strong public administration operated at state level, and reform was carried out in a public hospital system predominantly owned by the state of Victoria.

In every case-study country and economy, health professionals and the public were wary of privatizing publicly owned and run health services. Every country/economy had to stress that reform would respect widely held values for health services. The more successful countries managed the risk of conflict between the policy agenda and dominant values either by adopting a more incremental, less market-oriented model for reform (Tunisia, Hong Kong), or by emphasizing quality improvement as a major reform goal (Tunisia, Singapore, Malaysia, and to some extent, the state of Victoria).

**Actors**

In every case of major organizational reform, a small group of key policymakers and opinion leaders was able to form a consensus on change and drive policy decisions through at central government level. This same group, in more successful cases, continued to exercise leadership during implementation.

Health professionals employed in public hospitals and staff unions played a major role in opposing the implementation of reform. In
general, these groups perceived reform as a threat to civil service employment conditions and opposed management’s strengthened role and augmented resources in autonomous or corporatized hospitals. Reforms in the more successful group were implemented largely according to plan, despite staff opposition, but management had to negotiate and compromise with staff groups and unions over pay and benefits in the transition from the civil service to the corporatized entity. Commonly, transferring staff were offered “grandfathering” arrangements to protect their employment conditions, at least for a period. This increased implementation costs or deferred expected savings.

In most cases studied, the public sector retained dominance, if not monopoly, over hospital service provision after reform. Because no marked downsizing was associated with the changes, in practice there was little threat to health professional interests. As part of earlier phases of organizational reform, ancillary staff had greater adjustments to make when their services could be contracted out (e.g., cleaning, laundry, maintenance, catering).

Successful countries achieved coalitions of support for the policy agenda among senior bureaucrats and hospital managers, the potential beneficiaries of increased managerial freedom and removal of civil service pay constraints. The state of Victoria managed the agenda for public consultation and debate to avoid confronting controversial issues (such as closure of particular hospitals) until legislative and organizational changes were in place and by “internalizing” trade-offs over hospital configuration within larger networks of hospitals. Negotiation and compromise during the process also mitigated opposition from employee and health professional interests. In some cases, doctors’ interests were more strongly aligned with those of senior managers by reform design, which permitted significant increases in medical salaries or investment in upgraded facilities and equipment (Singapore, Malaysia).

The public and patients exercised only a passive role in influencing the reform agenda and process in most cases. Health service users are a disparate, individualized, and often vulnerable constituency, lacking the information or organization to exert consistent
or concerted influence on the national policy agenda or on local resource allocation and service delivery. Nonetheless, the passive role of public opinion and values was a powerful constraint on the reform agenda in some countries. In the state of Victoria, however, a transparent public process of consultation—albeit around a carefully managed agenda—took place prior to organizational reform.

**Process**

The more successful cases were countries with strong central policy and administrative institutions with significant technical capacity for implementation and for monitoring and supervising autonomous or corporatized providers. However, even in a country with the considerable technical capacity of the United Kingdom, organizational reforms encountered problems and achieved rather disappointing results.

Hong Kong and Singapore established a dedicated new entity, in the form of a holding company, to oversee organizational reform and to supervise hospitals after reform. The holding companies served to distance some key aspects of implementation from the Ministry of Health and from the political process, which may have sharpened change in the operating environment for autonomous hospitals. The state of Victoria pursued a similar course in establishing hospital (and related provider) networks. The United Kingdom also sought to distance autonomous providers from the Department of Health, by establishing new regional offices to oversee trusts not “contaminated” by traditional bureaucratic culture. Tunisia established dedicated Project Coordination Units within the Ministry of Health to manage implementation, but the Ministry and Minister of Health appear to have been closely involved in implementation. Victoria formed a planning board, with some degree of independence from government and designed to achieve credibility with the health sector and the public, to develop proposals and receive public submissions. Perhaps more critically, the relative independence of the newly established networks served to distance the government from the subsequent rationalization.
The more successful cases exhibit a range of strategies for matching the scale and pace of reform with institutional capacity. Malaysia, Tunisia, and Singapore began their reforms on a limited scale at the tertiary level or in teaching hospitals, where institutional capacity and potential benefit from change are greater. Singapore expanded implementation in stages from a single pilot hospital to successive waves of hospitals. The state of Victoria sequenced its reforms in several stages: it began with financing reform and budget cuts; followed with a merger of hospitals into networks and a shift to a more autonomous, commercial mode of organization; and finally introduced a new investment program incorporating public-private partnerships that enhance competitive pressures.

The United Kingdom successfully phased implementation using two mechanisms. First, participation in the initial wave of implementation was voluntary, so the most enthusiastic hospitals pioneered the changes, and confrontation with the opponents of reform was avoided. Second, hospitals had to meet prequalification requirements before receiving autonomy. These requirements included preparation of an adequate business plan, demonstrating financial viability. This acted as a check on the hospital’s managerial, financial, and technical capacity to handle the demands of autonomous status.

**Problems Encountered in the Less Successful Cases**

Fiscal, political, and practical constraints, a mismatch between reform ambitions and institutional capacity, and opposition from unions, professional associations, and civil service employees were among the chief problems reformers encountered.

**Content**

In the absence of change in funding 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
constrained hiring and pay and protected public hospital employees from redundancy or redeployment. 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 only partially funded mandates to provide access for the poor. Weak enforcement undermined attempts to protect access by regulation.

Political and practical constraints (small market size) on provider competition and weak purchaser performance prevented New Zealand from increasing market exposure of corporatized hospitals. The intention was to make corporatized health service providers the residual claimant on profits (apart from dividends payable to the government as shareholder). However, almost all providers ran operating deficits, and the government financed them in a non-transparent way, which left the government as the de facto residual claimant.

Both New Zealand and Indonesia struggled with a mismatch between the complexity and scope of reform design and institutional capacity in implementation and management. In Indonesia also, the institutional capacity of the Ministry of Health in policy design, implementation, and monitoring was not strong. Moreover, its authority to enforce regulations at provider level was weak.

**Context**

Reform carried out in an environment of fiscal pressure has been less successful (New Zealand, Indonesia, and, to a lesser extent, the United Kingdom). In this context, reform has been presented as necessary for efficiency gains and cost reductions. Health professionals and unions have reacted adversely to these messages, and the public has feared loss of services or increases in out-of-pocket costs. In these circumstances, countries have been poorly placed to meet the transition costs of reform, to “buy in” support from key stakeholders, or to pay for the growth in hospital activity that typically results from output-related provider payment and recognition and funding for social functions.
In managing the conflict between dominant values within the health sector and the agenda for organizational reform, New Zealand and the United Kingdom appear to have been less successful. Both countries began health reform toward the end of a period of controversial reform in the role of the state in other sectors. Many people saw the extension of corporatization and privatization policies to the social sectors a “bridge too far,” and it became a defining issue for opposition political parties of the Left. Recent, more socially oriented governments have sought to preserve aspects of the reforms related to efficient management and public accountability, while discarding market-related features.

Actors

In New Zealand and, to a lesser extent, in the United Kingdom, changes in political leadership made momentum and clear direction in health reform difficult to sustain. In New Zealand, changes in senior positions in the health sector bureaucracy and changes in bureaucratic responsibility for health reform implementation complicated implementation.

More than one ministry or agency shared responsibility for aspects of health policy and reform implementation in New Zealand and Indonesia and, to a lesser extent, in the United Kingdom. Conflicting agendas and interests among key bureaucrats and their agencies account for some of the shift between original policy intentions and results.

More often than with more traditional health sector reforms, finance ministries often play a crucial role in marketizing organizational reforms. In the United Kingdom, for example, the Treasury was reluctant to allow NHS trusts any financial freedom that conflicted with wider public sector policies regarding private finance and capital expenditure. In Indonesia, the Finance Ministry did not implement the subsidy changes needed to achieve the full benefit of reform in public hospital services.

In Indonesia, local governments, as the owners, regarded public hospitals as a source of revenue. This vested interest conflicted with
some reform objectives. Support from the central government ministry responsible for regional and local government conflicted with Ministry of Health policies.

As in the more successful cases, health professional associations, unions, and public interest groups played a key role in New Zealand health reforms. Instead of national negotiation, the New Zealand government adopted a strategy of deregulation and decentralization for dealing with employee groups. This strategy appears to have been less successful in the health sector than in most other sectors of the economy. In New Zealand and the United Kingdom, opposition political parties of the Left took up union opposition to health reform, which heightened conflict and generated uncertainty about the durability of the reforms.

**Process**

The political environment in New Zealand and in Indonesia made the adoption and implementation of a consistent, stable set of policy dial settings difficult to ensure. In New Zealand, uncertainty was introduced into the implementation process by a short (three-year) electoral cycle and an environment of unstable minority or coalition governments. In Indonesia, reform was complicated by involvement of multiple levels of government, with resulting attenuation of capacity and/or motivation to implement national policies at lower levels of government. In both countries, lack of a single agency responsible for implementing the reforms exacerbated continuity problems. New Zealand split implementation responsibility across two or three agencies and encountered conflict and poor coordination between temporary reform implementation units and mainstream ministries.

The New Zealand reforms were criticized for lack of participation or negotiation in development and implementation. Most case-study countries/economies carried out national negotiations over reform implementation with national public hospital labor unions and professional associations. New Zealand sought to pursue a decentralized approach to dealing with powerful, nationally organized health sector employee interests, leaving relatively inexperienced management
teams in corporatized hospitals to manage difficult relations with staff. More flexible, decentralized labor relations in the public health system appear to have made for a troubled transition; whether there are longer term benefits remains to be seen.

**Lessons from the Case Studies for Reform Design**

Even the more successful cases of organizational reform encountered difficulties, and every gain has come at a price. Countries that successfully pursued autonomization or corporatization in other sectors found this type of organizational reform much more difficult to implement in the public hospital system.

The case studies illustrate some possible reasons for the absence of unqualified successes. Reform entails:

- Making policy trade-offs between incentives for efficiency, cost containment, and equity
- Designing procedures for implementing complex and sometimes unpredictable reform processes
- Dealing with credibility issues, for example, about government’s willingness to allow a corporatized hospital to fail.

The studies also suggest some strategies for minimizing the problems that have been encountered.

**Policy Trade-offs**

In health policy, there is a well-known trade-off between the goal of creating more powerful incentives for systemic efficiency (through residual claimant status, output-based payment, and patient choice) and the goal of cost containment. In other sectors, where third-party payment is not a feature of the market environment, this trade-off is less of an issue.

Increased pressure on total health expenditure, associated with rising hospital activity, was a feature of the more market-oriented or-
ganizational reforms (Singapore, Malaysia). However, it does not appear to have diluted support for the reform in Malaysia, perhaps due to the small scale of implementation or to its success in attracting additional nongovernmental revenue. It did, however, lead to a second wave of reform to introduce stronger cost-containment mechanisms.

In New Zealand and, to a lesser extent, in the United Kingdom, cost containment was a dominating concern and led to compromises in policy design in an attempt to mitigate this risk, which in turn attenuated incentives for improved performance. The state of Victoria appears to have managed this trade-off more successfully than other countries, but it is worth noting that Victoria achieved some of the cost reductions and productivity gains through payment reform and budget cuts prior to organizational reform.

A trade-off, though not inevitable, is also sometimes assumed between efficiency and equity objectives. Although the poor in some countries may have experienced a reduction in access as autonomous hospitals faced higher powered incentives to earn revenue (Singapore, Indonesia), other countries adopted policies to compensate hospitals for social mandates (the United Kingdom, New Zealand, Hong Kong). In the United Kingdom, New Zealand, and the state of Victoria, hospitals were compensated for “public good” functions such as clinical teaching and research and were funded to provide universal access to services. In countries with grossly inefficient and inadequate public services, improvement in the quality and efficiency of public hospitals through management autonomy may slow the trend toward a two-tier health system, where the rich access private care and the poor are relegated to public facilities.

An emerging hypothesis in some of the case-study countries and economies is the notion that a trade-off for particular medical procedures occurs between the technical efficiency gains from vigorous competition and the allocative efficiency gains from financial or managerial integration across services; this may internalize some risks and improve the ability to foster “continuity of care.” Organizational reform of a single unit or level of services may diminish coordination and reduce the motivation to provide services at the most efficient point of care. If funding agencies are not directly responsi-
ble for hospitals, they may be able to reduce pressures toward disintegration by encouraging continuity and cost-effectiveness in purchasing. Such purchasing strategies can improve systemic allocation of spending and continuity of care by diminishing provider capture of revenue flow.

Which services and facilities are bundled together when autonomization or corporatization occurs also deserves close attention. Bundling decisions affect an organization’s ability to compete as well as the incentives and transaction costs of coordination. Bundling may be important to internalize some kinds of resource shifts within an organization, particularly rationalization of capacity or financial or managerial integration across services for allocative efficiency. The state of Victoria is the only case in which bundling issues received clear attention, and were linked to the objective of rationalizing excess capacity. Policymakers must decide up front whether they want to achieve collaborative networks or competition among providers. Corporatization may not be appropriate for collaborative networks. In some contexts (very large cities or areas of high population density), it may be possible to develop competing networks and achieve both types of benefit. This appears to have occurred in Melbourne, Victoria, and in parts of London but may not be achievable in smaller population centers and more sparsely populated areas.

**Mitigating Strategies**

The case studies suggest some mitigating strategies:

- **Do not overlook reforms to funding arrangements and development of a strong “purchaser.”** These aspects may be as important as hospital reform for achieving organizational reform objectives and balancing the trade-off between cost containment and increased productivity.

- **Retain input-based supervision and budget control levers until new accountability levers are in place** (market pressures, competent boards, output monitoring, audit).

- **Put in place clear regulatory or contractual provisions to ensure that social functions are maintained.**
• Develop effective monitoring arrangements and capacity that allow sufficient autonomy but prevent abuse. They are critical for oversight of autonomous hospitals.

• Make clear from the outset the areas of service where coordination and cooperation are crucial and need to be retained through internalization within the organization or other specific mechanisms.

**Complexity**

Health system reform in general is complex. Because of the nature of hospitals and tertiary services, hospital reforms are particularly challenging. Marketizing organizational reforms are yet more challenging, since they require concurrent implementation of many mutually reinforcing changes not only within hospitals but also in the systemic environment beyond the hospital. Complexity affects both design and implementation.

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. These reforms rely to some extent on the presence of competition or contestability. To release the potential for competition, simultaneous changes in the market environment may be required. In countries or markets too small for competition, consumers will need regulatory or contractual mechanisms to protect them.

If government or one of its agencies is the dominant payer, purchasing or contracting arrangements can provide much of the regulation needed to influence the corporatized organization’s behavior. Contracting can be more flexible and effective than regulation if purchasers have adequate capacity and transparency. In any case, good contracting reduces the need for regulation.

Reform modalities that delegate autonomy to hospitals must create alternative, indirect mechanisms for accountability to constrain opportunism and maintain quality. These mechanisms include performance contracts for boards and managers, contracting and payment mechanisms for purchasers or insurers, and monitoring and regulation by supervisory agencies. These mechanisms must be de-
signed and operated in a coherent, consistent way to balance freedom and accountability. Decision rights must be clearly allocated between supervisory agency and hospital management. Reform must include provisions for changing the supervision mechanism of reformed organizations in ways consistent with the reform model. Reform can neither leave bureaucrats with the right to intervene daily in hospital management nor leave hospitals without oversight.

Autonomization or corporatization will not remove the need for coherent planning of major capital investments in hospitals or for an allocation mechanism for recurrent and investment funding for the sector. As long as hospitals remain in government ownership, no normal capital market mechanisms permit or foster mergers or rationalization across organizational boundaries. Even in countries with largely private hospital services, planning or capacity regulation is often found to be a useful adjunct to other mechanisms for managing demand.

More broadly, the success of corporatization relies heavily on the level of development of private institutions and framework law governing the private sector. Corporatization relies on 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 private sector institutions (customs, norms, courts) are dysfunctional, corporatization may shift responsibility into a vacuum and make performance even worse.

Organizational reforms seeking to create market or marketlike incentives place heavy demands on political and bureaucratic decision makers. Successful reform requires a high degree of predictability and coherence in decisions across a range of policy settings, and changing patterns of direct political interference in hospital management and resource allocation requires discipline.

Few countries or economies managed to achieve this degree of coherence and discipline in policymaking or coordination in implementation. The fact that several had to undertake a second phase of reform to correct emerging problems points to the difficulty of getting these reforms “right the first time” and the need to be prepared to review, learn, and adapt during reform. The more successful
group of cases also includes countries/economies that adopted more modest, incremental reforms—also less complex and demanding. Some of the more successful cases managed risk by phasing reform implementation.

**Mitigating Strategies**

The case studies suggest some mitigating strategies:

- Set a broad vision rather than a detailed blueprint at the beginning of the process.
- Include in the reform process: purchasing, supervision, and regulatory measures, including review of general regulation (e.g., labor law) that impinges on the reform objectives.
- Provide strong central leadership for policy development and oversight of implementation at the ministerial level, at the senior level in the policy bureaucracy, and in overall project management—to maintain a coherent approach and drive through key changes.
- Plan and sequence implementation carefully so that complementary elements are implemented together, and linkages among reform elements can be achieved.
- Promote open information exchange between providers, purchasers, and the Ministry of Health.
- Include feedback loops in reform management to allow necessary adjustments and corrections in design and flexibility to respond to lessons learned during the process and changes in the external environment.

**Credibility**

Most case-study countries and economies had a strong constituency for public ownership of hospitals. A number of governments explicitly promised or legislated to prevent future privatization of autonomous or corporatized hospitals. Creating a credible threat that corporatized hospitals will be allowed to fail has been a difficult decision for governments, partly because communities strongly support keep-
ing local hospitals open and partly because, as quasi-essential facilities, many acute care hospitals have some natural monopoly power. Commitment to continued public ownership wards off any serious threat of takeover.

After corporatization, the mechanisms by which the hospital’s budget constraint is set become more complex. Part of the budget constraint derives from contracts with one or more purchasers, but the hospital’s freedom to earn and retain private revenue may also increase. Managers may have greater freedom to borrow and to manage debtors and creditors. In this environment, the hospital may perceive that the budget constraint is weaker and less credible.

These factors can lead to a cycle of poor incentives and performance if corporatized entities run deficits (as in the New Zealand case). However, residual claimant status has the potential to create a virtuous cycle of improved incentives for corporatized entities that run surpluses.

Two mechanisms have been used by some case-study countries and economies to counteract the credibility problems inherent in publicly owned autonomous or corporatized hospitals. The United Kingdom required hospitals to produce a business plan demonstrating financial and managerial viability before receiving autonomous status. Several countries established new supervision mechanisms, accompanied by powers for supervisors to reward or penalize hospitals for performance. This function was carried out by a holding company in Hong Kong and in Singapore and by a special unit of the NHS Executive in the United Kingdom. In New Zealand, less successfully, this responsibility was given to a stand-alone agency responsible for monitoring all state-owned enterprises.

**Mitigating Strategies**

The case studies suggest some mitigating strategies for designing corporatization:

- Take into account, when designing reforms, the potential for loss of budget control as reformed hospitals move toward a focus on financial viability and hence budget or profit maximization.
• Make sure corporatized hospitals have a strong and depoliticized supervisory mechanism, supported with prompt, comprehensive financial reporting, private sector accounting standards, and disclosure of information.

• Ensure that the Ministry of Health changes its behavior toward providers, consistent with new roles.

• Make hospitals financially viable from the start, if the new incentive regime is to have meaning.

Lessons for Implementation from the Case Studies

The framework for implementation set out in chapter 2 makes a case for viewing policy design and implementation as part of the same process. In circumstances where there are trade-offs between different policy objectives, and conceptual and institutional complexity, policymakers should plan on adjusting course during the implementation process. Implementation is more likely to be effective, and risk of policy reversal lower, if the evolutionary (and inherently messy) nature of the policy process is explicitly acknowledged.

Case-study countries and economies employed a range of methods for planning and implementing organizational reform of their hospitals, with varying success. In some instances, they planned these strategies in advance but more commonly developed them in response to problems that arose during implementation. A number of countries consciously employed strategies to facilitate implementation, engage stakeholders, and bring to bear additional financial, technical, and managerial resources for implementation. In the United Kingdom case over a period of years, the government built up a strategic implementation process (chapter 7, this volume).

A number of case-study countries/economies established dedicated implementation units. These case studies highlight the need for implementation units to have critical mass, stable staffing, and clear powers and responsibilities, defined in advance of reform.

Chapter 2 of this volume (table 2.1) sets out a framework of policy analysis tools that can be used for planning and managing change,
Table 4.4 Success and Failure in Planning and Managing Implementation

<table>
<thead>
<tr>
<th>INSTRUMENTS FOR PLANNING AND MANAGING IMPLEMENTATION</th>
<th>NEW ZEALAND: PLANNING ACTIONS CONTRIBUTING TO FAILURE</th>
<th>SINGAPORE: PLANNING ACTIONS CONTRIBUTING TO SUCCESS</th>
</tr>
</thead>
</table>
| Macroeconomic analysis of the ease of implementing policy change | • Multiple implementing agencies with conflicting roles and views  
• “Big bang” implementation, before assessing hospital financial viability  
• No budget for transition costs | • Single holding company to oversee change  
• Phased implementation, beginning with a pilot project; roll-out to hospitals likely to succeed |
| Explicit statement of values underlying policy | • Support for organizational reform damaged by opposition to user charges  
• Weak constituency building for change | • Organizational reform bolstered by public support for financing reform  
• Active public information campaign, responding to public criticism |
| Stakeholder analysis | • Income for health professionals constrained by fiscal stringency at time of reform implementation  
• No financial inducements offered to “oil the wheels” | • Significant salary increases for doctors in corporatized hospitals  
• Staff offered protection of civil service pay and conditions during transition |
| Analysis of financial, technical, and managerial resources available | • No training or management development provided  
• Provider payment reform hampered by weak information systems | • 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 health professions, community, employers, unions  
• Two-year public debate of issues |

developed by Walt. Table 4.4 uses this framework to contrast aspects of implementation in Singapore, one of the more successful reforms, and New Zealand, a less successful case.

As in other sectors undergoing new public management reforms, increasing management autonomy has proven easier than developing
effective new mechanisms for tightening public accountability, based on depoliticized boards, arm’s-length contracts, and regulation. In the health sector, the complex and expert nature of the production process creates particular difficulty in specifying and monitoring contracts that capture all the important dimensions of performance. High transaction costs and moral hazard bedevil attempts not only to align the behavior of health sector managers and staff with the agenda of their political principals, but also to win public confidence that the political processes governing resource allocation and performance in the health sector adequately represent social values.

Effective implementation requires an authorizing environment that provides the necessary support to enable senior managers in the health system to pursue reform (figure 4.1). This occurs when the values and interests of three groups—politicians, managers and staff, and civil society—intersect. The halting progress of marketizing organizational reforms in some cases (New Zealand, the United Kingdom) has reflected disjunction between social values and the political agenda. While senior managers in both countries were generally able to “manage up” to secure support from political leaders, they were less able to “manage down” to align the political and managerial agenda with the stance of many health professionals in the public

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**Figure 4.1** Authorizing Environment for Effective Implementation

![Diagram showing ideal and real environments](source)

hospital system. Social values for health in these countries tended to align with the views of health professionals.

Three major factors appear to underlie reforming countries’ difficulties in achieving the necessary authorizing environment: the very powerful position of medical interests; the high demands placed on political decisionmakers in seeing this type of reform through; and the shortfall between available institutional capacity and the managerial requirements of this complex type of reform.

**Powerful Interests**

Organizational reforms in the health sector will engender opposition by powerful stakeholders who will fight to maintain the status quo. Staff concerns about loss of job security or public sector employment benefits featured in every case of organizational reform in the health sector as well as in other sectors. Unions and professional association opposition has proved more difficult for governments to contend with in the health sector than in other sectors. Public confidence in health professionals is high in many countries—at least relative to confidence in politicians. In the United Kingdom and New Zealand, health professional organizations successfully mounted public interest arguments against organizational reforms and focused the public debate about reform on issues of values and quality. This left reform advocates with the difficult job of building a positive case for improving efficiency and financial performance. In these circumstances, hospital organizational reform is politically costly.

The need to accommodate staff and professional interests increased the transition costs of reforms in most case-study countries and economies, and restricted the scope for competition. Transition costs arose from union pressure to protect pay and jobs and from political pressure to spend to demonstrate early successes and visible benefits for a public anxious about the ill effects of reform. In the United Kingdom and New Zealand, governments attempted to increase support for reform by increases in health spending for elective surgery to reduce long waiting times. Tunisia accompanied organizational reform by investing in autonomous hospitals for visible upgrades in quality.
A country’s people may have strong feelings about the health system (and may be encouraged by supporters of the status quo to think they do), which constrains the design of the reforms. In some countries, people feel that exposing health services to markets is inappropriate. None of the case-study countries and economies appears to have explicitly addressed issues of underlying values. On the contrary, some governments seemed to avoid such issues to minimize conflict at the policy design stage, only to be accused later of hidden agendas—typically for privatization and reduction in public subsidies for health care. Governments typically responded to these challenges from interest groups and media by promising to retain public ownership of hospitals.

**Mitigating Strategies**

The case studies suggest some mitigating strategies for enlisting the support of powerful interests who may oppose reform:

- Plan for involving stakeholders in design and implementation.
- Ensure that the focus of reform action is on patients and on quality as well as efficiency.
- Adopt a pro-active communications policy that targets all sector constituencies.
- Do not alienate doctors—they must be part of the solution.

**Political Demands**

Political stability and consensus among political forces is critical because this complex type of reform requires years of coherent decisions and consistency in their implementation. Because many reform elements are tightly linked, achieving improvements means that all the linked elements must be implemented together.

More than in many other sectors, the benefits of reform are likely to come only in the medium to longer term, after new incentives have been translated into practical management strategies and changes in the way services are delivered. In many case-study re-
forms, performance deteriorated and costs went up initially. If policymakers cannot “stay the course,” the benefits may never be reaped.

However, because of the nature of health services—visibility of public hospital services and strong feelings among the population about their health system—politicians will be pressured and often inclined to bow to short-term pressures, undermining the reform model. This model calls for strict political discipline to refrain from direct intervention in hospital management and allocation decisions in the interests of overall system equity and efficiency. Politicians may bear a high political cost in the short term from confronting the powerful interests opposed to reform before the benefits of reform can be counted.

**Mitigating Strategies**

The case studies suggest some mitigating strategies for enlisting political support for reform:

- Manage public expectations. Do not oversell reforms or promise quick benefits.
- Build strategic management capacity, supportive of reform, in the public health sector to manage “up and down” in order to obtain the authorizing environment for reform.
- Build broad-based political consensus that does not rely on one person or party.
- Begin implementation in selected supportive pilot sites to garner support for reforms.
- Use demonstration projects to show early results and go for high-visibility, early wins.

**Changed and Higher Demands upon Management Capacity**

The risk of implementation failure is high if the scope and pace of reform are not matched to institutional capacity. More ambitious reforms were carried through in countries and economies with strong
institutional capacity in large central ministries or departments of health. Among the successful smaller case studies, Hong Kong and Tunisia operated with more limited central capacity but adopted more incremental and cautious models of reform.

These reforms strengthen the role and responsibilities of managers. Autonomous and corporatized hospitals will need stronger management skills and management systems markedly more sophisticated than those prevalent 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 is that secondary or tertiary health care services are much 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 a high degree of 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 more critical in reformed hospitals. A purchaser/provider split and contracting cannot be instituted without a minimally effective management information system. Financial management systems also have 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; organizations face stronger incentives to monitor costs and structure services efficiently and are likely to be more motivated to use information systems.

If the institutional endowment is too low—public sector administration skills lacking, management skills too limited, private sector institutions too weak—this type of reform may worsen the situation
in the public health system by increasing the risk of loss of control and abuse of public resources. The design and implementation plan should take into account the gap between existing management skills (likely to be administrative in nature) and the skills needed to manage under the reformed regime.

**Mitigating Strategies**

The case studies suggest some mitigating strategies for dealing with changed and higher demands on management capacity during and after reform:

- Plan, and allow time and budget for management training, continual staff training, and institutional development.

- Design and implement management information systems to handle new payment arrangements and meet private sector financial management and accounting standards.

- Develop incentives and qualifications criteria to ensure recruitment of appropriate managers for reformed organizations; benchmark private sector employment conditions.

- Implement autonomization/corporatization based on criteria of readiness in institutional and managerial capacity.

**Lessons for Monitoring and Evaluation**

The quantity and type of data available after reform severely limited all case-study authors’ attempts to evaluate reform in their respective countries. No country has attempted a prospective, controlled experimental study of this type of reform. In only one of the countries (the United Kingdom) were the performances of reforming and non-reforming hospitals compared. Because a number of the case-study countries/economies are either very small or chose to reform only a few hospitals, they would have trouble carrying out a statistically robust comparison of performance across reforming and nonreforming hospitals. Compelling practical reasons argue for selecting hospitals...
to undergo reform in a nonrandom way—to enhance the prospects for successful reform.

The case-study authors were able to draw upon the framework set out in chapter 1 to provide a reasonably comparable approach to characterizing the nature of the policy intervention in their respective countries. Few data are available to measure the response of hospitals to this type of reform in a comparable way.

The impact of organizational reforms on hospital or health system performance is particularly difficult to measure. While all of the studies comment on the impact on technical efficiency, in most countries even this dimension of performance is not well monitored. Partial indicators of productivity are available, but in many countries, there is no useful measure of unit cost. Measures of quality, equity, and allocative efficiency are much harder to obtain.

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

Yet the very fact that these reforms are complex and often contentious makes it practically and politically important to articulate clear, measurable goals for reform and to monitor progress toward them. Monitoring the performance of health service providers and the health system itself across all the key dimensions is also an integral part of the reforms that develop or strengthen the roles of purchasers, supervisory agencies, or both. Provided that baseline data can be obtained before reform begins, these routine monitoring systems should generate the data to allow some measurement of reform impact.

Practical Approaches to Monitoring

The case studies suggest some practical approaches to monitoring:

- Define the political, strategic, and operational goals of the reform program and the criteria to be used to evaluate whether the goals have been attained.
• Define monitoring indicators of impact for all the key dimensions of performance—technical and allocative efficiency, equity, quality—in advance of implementation.

• Look for intermediate indicators of change in the form of changes in hospital behavior.

• Institutionalize monitoring as part of the role of purchasers, supervisory agencies, or both.

The Prospects for Reform in Developing and Transition Countries

The theoretical frameworks and case-study experiences set out in this volume emphasize the complexity and risks of hospital organizational reform and suggest demanding strategies for managing policy design and implementation. Although many of the case-study countries are middle- to upper income countries/economies with strong institutional capacity, they nonetheless achieved only partial success in implementing this type of reform. What does this augur for reform in the many developing countries with limited institutional capacity and limited resources to meet transition costs of change?

It might seem natural to conclude that autonomization or corporatization reforms in those countries or economies would be at even greater risk of failure unless accompanied by capacity building and systemic reforms in provider payment arrangements and regulation. Indeed, countries where public institutions are weak and corrupt may need more rigorous supervisory mechanisms as well as special mechanisms 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.7 Perhaps many developing and transition countries, despite major misallocation of resources in public hospitals, can achieve improvement with relatively simple and modest reforms in hospital management’s incentive environment. By contrast, recent reforms in stable, well-resourced,
relatively well-managed public hospital systems may be reaching a level of diminishing returns in efforts to promote efficiency.

Moreover, some developing countries may be granting hospitals autonomy for reasons and in circumstances outside the range of experiences in the case studies presented here. In developing countries, reducing the financial burden on the government’s budget by allowing hospitals to generate their own resources and retain private revenue is often the major rationale for autonomization. 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 capital markets. Even limited reforms of this sort appear capable of improving quality and staff retention. This, however, often comes at a high cost in terms of the equity implications for low-income and other vulnerable groups.

While the small group of cases in this volume does 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/economy experiences remain relevant in many developing and transition country contexts. A common developing country pattern of autonomization allows hospitals to keep private revenue and to procure their own supplies, while retaining central control over staff and investment. Typically, supervision of autonomous hospitals beyond the level of the board is weak or absent. The framework and case-study findings bring out the obstacles to capacity rationalization and the risks of neglecting social functions and of accumulating the supplier or creditor debts likely to result from this limited mode of reform.

Conclusions

The case studies suggest that governments should have modest expectations for organizational reform of health care delivery within the public sector when it leaves these providers with considerable monopoly power.
In other sectors, corporatization has been an unhappy midpoint between hierarchical control and full market discipline that can be provided by a competitive private sector. More analysis is needed to know if this is also true in the health sector, especially in the case of hospitals where social functions and public goods need to be taken into account.

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 improvement in technical efficiency and quality, if carried out as part of a set of complementary reforms in provider payment and market exposure.

Notes


2. Unlike Singapore, Malaysia, and New Zealand, hospitals in these countries were not established as companies under private company law or made subject to competition and other commercial law applying to private companies. Hospitals in Singapore, Malaysia, the United Kingdom, and New Zealand 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 the United Kingdom have moved away from a corporate financial structure to a simpler capital charge regime.


Hospitals in the transition economies of Central Eastern Europe (CEE) and the former Soviet Union (FSU) operate in an environment that has changed significantly since the socialist era.\(^1\) In many countries, general taxation has been replaced with, or supplemented by, payroll tax–based social insurance; hospital ownership has been transferred from central to local governments; new performance-based payment mechanisms have been adopted; and input markets have been partially or fully privatized and deregulated. This is in stark contrast to the hospital environment during the communist era, when hospitals operated as integrated units of the Ministry of Health (MOH), receiving input-based budget allocations.\(^2\)

These changes were expected to trigger changes in hospital behavior and improve performance. In particular, the move to social insurance and the implementation of performance-based provider payment mechanisms were expected to result in a reduction in excess hospital capacity, reduced reliance on inpatient care, and improved service quality. The transfer of hospital ownership to local governments was regarded as an instrument to improve responsiveness to local community needs and expectations. These envisioned behavioral changes have not occurred, however, and transition economies still have to contend with many of the same hospital problems as
10 years ago: excess capacity, inefficiency, and poor responsiveness to patient expectations.\textsuperscript{3}

In this chapter, we review the hospital reforms in 11 countries of Central and Eastern Europe and the former Soviet Union to explore why hospitals have not responded as expected to the reforms undertaken.\textsuperscript{4} Our main observation is that performance has not improved because hospital organizational structures have not been systematically redesigned to bring out synergies with new external incentives. Rigidities in terms of input use (labor, capital) inherited from the central planning era have remained and, as a result, hospital management still lacks autonomy to make changes needed to improve productivity and efficiency. Further, the persistence of soft budgets, ineffective accountability mechanisms, and lack of formal market exposure have weakened the efficiency pressures of the new provider payment mechanisms. This has created an inconsistent incentive environment; overall the external incentives link rewards and sanctions to performance and organizational structures reflect an input-oriented central planning approach where rewards and sanctions are unrelated to performance.

In this chapter, we describe the organizational structure of hospitals in CEE and FSU and demonstrate how the current structure undermines hospitals’ potential for improving efficiency and quality. We also explore why reform of the hospital sector lagged behind financing reforms in this region and how this “weak link” could be addressed in the future.

As hospital organizational structure is not well documented in the countries we are examining, this study is based on structured interviews conducted in the summer of 1999. The interviewees included government officials in Ministries of Health, health insurance funds, members of academic institutions, professionals at World Bank resident missions, and hospital-based physicians in the selected countries. The 11 countries were selected based on the availability of requested information and contact person. The sample, thus, is not representative of the region. As a whole, it overrepresents higher income countries that have established social insurance, undertaken provider payment reform, and decentralized ownership of hospital
facilities to local governments. As a result, the conclusions of the study cannot be directly extended, without careful adjustments, to the lower income countries that have made fewer structural changes.

**Determinants of Hospital Behavior**

Organizational structure is increasingly recognized as a significant determinant of hospital behavior. Previous literature on hospital performance focused mostly on the impact of external incentives. In particular, payment mechanisms and competitive pressures were the object of much analysis.\(^5\) This approach assumes that hospital behavior is a response to external incentives alone and ignores the potential of organizational structure to mitigate the impact of these incentives.

We take as a starting point the framework from chapter 1, that the behavior of hospitals is determined by the combined influence of the external environment and hospital organizational structure (figure 5.1). Incentives in the external environment are associated with the functions of governance, stewardship, and purchasing (individual market-
Incentives associated with organizational structure are associated with autonomy, market exposure, residual claimant status, accountability, and social functions. If the external environment does not generate performance pressures, hospitals will not have a reason to strive for high performance. However, even with well-designed external incentives, the resulting hospital behavior might be moderated by its organizational structure. Thus, synergistic design between the external environment and the organizational structure of hospitals create the incentives hospitals face, and hence their alignment is critical to successfully change organizational performance.

The External Environment

Two fundamental changes took place in the external environment of hospitals in CEE and FSU during the transition period: introduction of social insurance and decentralization of hospital ownership. The former affected the organized purchasing function while the latter affected governance arrangements.

The Inheritance

In the pretransition era, the Ministry of Health was the predominant actor in the hospital environment. The MOH was in charge of three of the four functions discussed above: governance, organized purchasing, and stewardship (figure 5.2). All hospitals were state-owned and in governance structure they were direct budgetary units of the MOH or its district arm. Revenue allocation was essentially historical, rigid line-item budgeting. The hospital sector, and the health sector in general, were guided via the central planning of physical and human resource capacity. As all health care was free, and the estimated level of informal payments in the pretransition era was low, the impact of providers’ individual choice had little effect on hospital revenue.6

Hospital capacity was a key measure of health system performance, and the objective of health policy was to expand the number
of facilities, beds, and physicians. Hospital budgets were determined by input-based normatives such as the number of hospital beds and physicians. Allocations were made as line items, often with more than a dozen categories, and resources could not be transferred from one category to another. Initially, this input-based approach helped to improve peoples’ access to care. However, over time it created high levels of fixed costs. As line-item allocations rarely changed, it provided incentives for excessive use of inputs and hospital-centered care, and allowed little financial flexibility for innovation.\(^7\) This inheritance defined the most egregious problems to be addressed in the reform of service delivery for the transition decade: to reduce excess capacity and overspecialization, improve microefficiency, enhance responsiveness to users, and strengthen financial management.\(^8\)

**The Transition**

The previous external environment characterized by one predominant actor—the Ministry of Health—has fundamentally changed in
most countries over the last decade (figure 5.3). This change can be characterized as the separation of the three functions of stewardship, purchasing, and governance into three distinct organizations. This separation took place through the establishment of social insurance funds and the decentralization of hospital ownership. The establishment of social insurance meant the transfer of the budget allocation and purchasing functions from the core public bureaucracy (MOH) to newly created parastatal organizations. Decentralization is characterized by the separation of the stewardship and governance functions, which meant that the core public sector bureaucracy transferred its ownership of hospital facilities to local governments. Both developments resulted in the entry of new organizations into the health sector, creating a pluralistic hospital environment and thereby a new set of external incentives and pressures.

From the perspective of hospitals, the key change that accompanied the establishment of social insurance was the implementation of performance-based payment mechanisms and the introduction of explicit contracting with providers. Langenbrunner and Wiley provide a detailed discussion of new payment mechanisms in the region. For our purposes, it suffices to say that most countries re-
viewed here have either fully introduced or experimented with payment mechanisms that link hospital revenues—fully or in part—to some aspect of their output. The provider payment mechanisms adopted range from sophisticated DRG-based (diagnosis-related group) payment (e.g., more than 700 categories exist in Hungary), to simple case-based payment (e.g., 30 categories are found in Georgia), but also include other performance-based systems such as per diem, fee-for-service, or mixed systems. Many expectations were attached to these new payment mechanisms. While some of them may have been misguided, based on international experience, the most important expectation was that output-based payment would make excess hospital capacity obvious and costly for hospitals to maintain. Thus, it was hoped that hospitals would respond to change in the provider payment mechanism by downsizing their physical and human resource infrastructure.

The second key change from the perspective of hospitals was the transfer of the ownership of general hospitals from the core public bureaucracy to municipalities. Teaching and tertiary hospitals remained under the control of the Ministries of Health and Education (table 5.1). As hospitals became local political assets after ownership transfer, it was expected that local governments would provide a layer of local accountability over hospital behavior, in both the financial and professional sense. Local governments, being more sensitive to the needs of local populations than the central core bureaucracy (MOH), were thus expected to put pressure on hospitals to be more responsive to users.

The assumption underlying this reform was that, through the local electoral process, communities would be able to convey their preferences to local authorities and directly exercise their voice in matters of hospital performance. Voters’ ability to appoint and remove elected officials was key to holding local government officials accountable. In turn, this required that local government officials hold hospitals accountable for their performance in line with community expectations.10

Both the establishment of social insurance and decentralization reflected the transition ideals of reducing the centralized powers of the
Table 5.1 Ownership and Legal Organizational Status of Hospitals

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>ORGANIZED PURCHASER OF HOSPITAL CARE</th>
<th>OWNERSHIP OF HOSPITALS</th>
<th>CENTRAL STATE OWNERSHIP</th>
<th>LOCAL GOVERNMENT OWNERSHIP</th>
<th>HOSPITAL GOVERNANCE STATUS AND RELEVANT LEGAL REGULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>Ministry of Health</td>
<td>✓</td>
<td></td>
<td></td>
<td>Budgetary unit</td>
</tr>
<tr>
<td>Croatia</td>
<td>Single payer national health insurance fund since 1993</td>
<td>✓</td>
<td>✓</td>
<td>Separate legal entity</td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Competing health insurance funds since 1993</td>
<td>✓</td>
<td></td>
<td></td>
<td>Nonprofit institutions. Act on nonprofit organizations not yet drafted</td>
</tr>
<tr>
<td>Estonia</td>
<td>Single-payer regional health funds</td>
<td>✓</td>
<td></td>
<td></td>
<td>Three types of nontertiary hospitals:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Municipal nonprofit institutions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Under joint-stock company law</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Trust form</td>
</tr>
<tr>
<td>Georgia</td>
<td>Partially Ministry of Health and partially single-payer national health insurance (State Medical Insurance Company)</td>
<td>✓</td>
<td></td>
<td></td>
<td>Treasury enterprises (self-financing state enterprises) registered as separate legal entity with own charter and operations governed under Law on Enterprises</td>
</tr>
<tr>
<td>Hungary</td>
<td>Single-payer national health insurance fund since 1992</td>
<td>✓</td>
<td></td>
<td></td>
<td>Separate legal entity allowed to enter into contractual arrangements while also a budgetary unit subject to financial reporting requirements under public finance law</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>Central and oblast-level budget and partially health insurance</td>
<td>✓</td>
<td></td>
<td></td>
<td>Some hospitals function as “health enterprises”—separate legal entities responsible for raising most revenues from user fees.</td>
</tr>
<tr>
<td>Latvia</td>
<td>Single-payer regional funds</td>
<td>✓</td>
<td></td>
<td></td>
<td>Two types of nontertiary hospitals:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Municipal institutions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Joint-stock company law</td>
</tr>
<tr>
<td>Lithuania</td>
<td>Single-payer regional health insurance funds</td>
<td>✓</td>
<td></td>
<td></td>
<td>Nonprofit institutions governed by a separate Law on Health Care Institutions since June 1996</td>
</tr>
<tr>
<td>Poland</td>
<td>Ministry of Health since 1999. Single-payer regional health insurance funds established in 1999</td>
<td>✓</td>
<td></td>
<td>Budgetary units</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Legislation passed on “independent units”</td>
<td></td>
</tr>
<tr>
<td>Romania</td>
<td>Ministry of Health until 1999. Single-payer regional health insurance funds established in 1999</td>
<td>✓</td>
<td></td>
<td>Extra-budgetary units as of 1998 governed by Public Finance Law</td>
<td></td>
</tr>
</tbody>
</table>
formerly monolithic state bureaucracy and removed key functions from the MOH. This has required massive institutional adjustments to move away from the former command-and-control approach to governing the health sector and to redefine its new roles and functions. The MOH, the new social insurance organizations, and local governments had to build new capacity and expertise in contracting, performance monitoring, formulating health sector strategy, and regulating the health sector.

**Changes in Hospital Organizational Structure during Transition**

In contrast to the systematic changes in the hospitals’ environment, changes in their organizational structure have been minimal, ad hoc in nature, and often side effects of other reforms instead of explicit. Below, we track changes in hospital organizational structure in terms of hospital autonomy, market exposure, residual claimant status, accountability structures, and social functions.

**Autonomy**

Autonomy is the extent of the decision rights that hospitals have over various aspects of the service production process. Decision rights over six aspects are now reviewed: labor input, capital input, other inputs, output level and mix, pricing to purchaser, and management processes.

*Decision rights over labor input.* In the communist era, physicians were salaried employees of the state. Overall staffing and salary levels were centrally planned and regulated, including the number of employees, appointments, remuneration levels, and hiring and firing. This meant that hospitals had little autonomy over personnel decisions.

During transition, central planning of human resource capacity has been deemphasized, and certain decision rights over employment of staff have been transferred to hospitals (table 5.2). In most countries, the state has ceased to be the direct employer of physicians, and hospitals contract directly with their employees. In theory, decision
Table 5.2 Decision Rights on Labor Input, Selected Countries

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>EMPLOYER OF PHYSICIAN</th>
<th>RELEVANT LEGAL REGULATION</th>
<th>PHYSICIAN PAYMENTS</th>
<th>APPOINTMENT OF HOSPITAL DIRECTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>Hospital</td>
<td>General employment law (no civil service status)</td>
<td>Salary—controlled by MOF during annual budget negotiations</td>
<td>Minister of health</td>
</tr>
<tr>
<td>Croatia</td>
<td>Hospital</td>
<td>General employment law</td>
<td>Salary subject to national uniform wage structure</td>
<td>Mayor of owner municipality</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Hospital</td>
<td>General employment law (no civil service status)</td>
<td>Salary subject to Act 143/1992, regulating remuneration of all public sector employees</td>
<td>Mayor of municipality</td>
</tr>
<tr>
<td>Estonia</td>
<td>Hospital</td>
<td>General employment law</td>
<td>Salary—off civil service pay scale</td>
<td></td>
</tr>
<tr>
<td>Georgia</td>
<td>Hospital</td>
<td>General employment law (civil service status does not exist)</td>
<td>Salary plus some FFS based on number and severity of cases</td>
<td>Minister of health</td>
</tr>
<tr>
<td>Hungary</td>
<td>Hospital</td>
<td>Civil service act</td>
<td>Salary regulated by civil service act</td>
<td>Municipality (municipal assembly or mayor)</td>
</tr>
<tr>
<td>Latvia</td>
<td>Hospital</td>
<td>General employment law</td>
<td>Salary—off civil service pay scale</td>
<td></td>
</tr>
<tr>
<td>Lithuania</td>
<td>Hospital</td>
<td>General employment law</td>
<td>Salary—off civil service pay scale</td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>Hospital</td>
<td>Civil service act</td>
<td>Salary</td>
<td>Owner government level</td>
</tr>
<tr>
<td>Romania</td>
<td>Hospital</td>
<td>General employment law (no civil service status)</td>
<td>Salary subject to Law 154/1998, regulating remuneration of all public sector employees</td>
<td>Advertised, selection and appointment by District Health Authority, based on MOH criteria</td>
</tr>
</tbody>
</table>

FFS fee-for-service; MOF Ministry of Finance; MOH Ministry of Health.
rights over hiring, firing, and remuneration have been transferred to hospital directors. In practice, however, this autonomy is constrained by rigid labor markets, political pressures, and financial constraints.

- **Rigid labor markets.** Employment regulations—whether general employment act or civil service act—create inflexible labor markets by making firing and hiring decisions costly and by making remuneration difficult to differentiate. For example, in Hungary and Poland, hospital staff members are civil servants, and the rigorous civil service act affords them significant protection such as open-ended contracts and substantial severance payment.\(^\text{11}\) Although Romania has no civil service act, the general employment act is just as inflexible in requiring open-ended contracts.\(^\text{12}\) Furthermore, even though physicians are employed directly by hospitals, their payment in nearly all countries is subject to the act regulating remuneration of all public sector employees—even in countries without special status/legislation for civil servants. The Baltic states are an exception where physicians have been entirely taken off the civil service salary scale.\(^\text{13}\)

- **Political pressure.** Most hospital director positions are allocated through a political process, based on party affiliation, local political interests, and personal networks (table 5.2). This suggests that the actions of hospital directors will be influenced by the interests of politicians who appoint them. This limits the range of unpopular measures directors are willing to take for the sake of greater efficiency. The scope of hospital managers’ autonomy is also limited by powerful health sector labor unions, which negotiate fiercely with government over salary increases. These negotiations define across-the-board pay for all staff that is binding for all hospitals. This leaves little room for managers to reward individual performance on a differentiated basis.

- **Financial constraints.** With significant decline in hospital budgets, many hospitals have problems funding severance pay and other benefits required upon dismissal.
Decision rights over assets and capital input. In contrast to labor inputs, hospitals do not have decision rights over physical assets and capital investment decisions. Decision rights over assets are vested with the owners: central or local governments. Thus, although hospitals have incentives to downsize facilities to become more efficient, they do not have decision rights to do so. Local government owners, on the other hand, may have decision rights, but for political reasons have no incentives to sell their assets. This misalignment of incentives and decision rights is at the heart of the difficulties experienced with downsizing the hospital sector. Even in Estonia, where hospitals can form trusts under foundation law and own assets, by-laws restrict a trust’s autonomy to liquidate assets. If a trust decides to divest its physical assets, the money goes back to the founding owners.

Not only do hospitals have no decision rights over the sale of assets, they also have no instruments to ensure that their assets retain their value. The new provider payment mechanisms do not contain depreciation costs; capital investments are still financed from general tax revenues in most countries. Allocations of capital investment continue to resemble the communist central planning process. Rational medium-term planning criteria are not applied, and decisions are often ad hoc and determined by personal and political networks. Medium-term planning is more likely to occur where international donor assistance is the major source of financing for capital investment and where donors require medium-term plans (as in Albania). Exceptions are the Czech Republic, where insurance payments to hospitals contain depreciation allowance, and Croatia, where the Health Insurance Institute procures and distributes all equipment.

Capital expenditures in all transition economies have significantly declined and generally are below replacement rate. As a result, the condition of physical assets has considerably deteriorated. Despite decentralization of ownership, municipalities are not explicitly required to maintain the value of their assets. Furthermore, their ability to do so is constrained by their lack of revenue rights. In other words, transfer of ownership—and with it the implicit responsibility to finance asset maintenance and new investments—has not been
matched with revenue-raising authority. This implies a contradictory arrangement for maintaining asset value.

**Decision rights over other inputs.** Nearly every country has extended full autonomy to hospitals for purchasing other inputs (nonlabor, noncapital) such as pharmaceuticals and appliances. This is a big departure from the pretransition era, with its MOH-centralized procurement of pharmaceuticals and other supplies. To regulate procurement processes, most countries have passed public laws that define hospital procurement practices and attempt to introduce transparency.

Little is known about the ways hospitals have used their increased autonomy in terms of pharmaceutical procurement and management. However, anecdotal evidence suggests consistent problems across the region. In Hungary and Croatia, hospital managers often complain that physicians have no incentives to economize on drugs because the more drugs patients get, the more likely they are to reward their physicians with gratuities. Fraud and corruption are often mentioned, too—in the form of staff selling the hospital’s drugs and pocketing the money.

**Decision rights over output mix and level.** Within their budgets, hospitals have full autonomy to determine output mix and level. Under communism, they already had this autonomy, since central planning was input-, not output-, oriented. With the purchaser-provider split, health insurance organizations are supposed to shift the emphasis from specifying inputs to specifying outputs in terms of both mix and level in their purchase agreements. However, most countries have not been successful in moving away from the inherited central planning approach and continue to focus on inputs. In Hungary, contracts between the Health Insurance Fund and hospitals still specify inputs, including the number of hospital beds, number of staff, physician hours, and types of hospital departments. Outputs are mentioned only as aggregate service categories of inpatient or outpatient care. This is all the more puzzling since payment from insurance funds is formally related to outputs, not inputs. In Romania, for
example, the District Health Insurance House signs an agreement with individual hospitals without specifying outputs and without any binding legal force. This lack of focus on outputs in the contracting process is a generic problem across the region.

An exception is the Czech Republic where contracts between insurers and hospitals specify the volume and type of services, reimbursement method, data provision requirements, termination conditions, and validity period. This is based on an overall list of services, the Schedule of Procedures, which specifies 5,000 procedures. Hospitals can decide which services to provide, but are reimbursed only for those in the contract.

**Decision rights over pricing to organized purchasers.** By and large, hospitals have little autonomy over payments, which are exogenous to hospitals and uniform for the entire country. This is the case in Croatia, Estonia, Georgia, Hungary, Lithuania, and Romania. Prices are set not by the payer but by the Ministry of Health or an appointed committee, made up of various interests (typically physicians). In Estonia, regional sick funds pay hospitals by a combination of bed-days and fee for service, based on a price list generated by the Health Care Services and Investigations Price Committee, housed in the Ministry of Health. Although hospitals are theoretically allowed to price services 25 percent below list, they rarely do. In Hungary, relative DRG weights are estimated and updated by Gyogyinfok, an MOH institute. A committee of MOH-appointed physicians, where medical specialties bargain and lobby, makes the final approval. In Georgia, prices of services in the state benefit package are set by the Committee on Medical Standards under the MOH and approved by Parliament. In a few countries, payment rates are set by negotiation between payers and hospitals, which gives hospitals some influence over pricing. This group of countries includes the Czech Republic, Georgia, and Poland.

**Decision rights over management processes.** An interesting issue is how the transfer of decision rights to hospitals has affected decision-making processes and management practices within hospitals. In most countries, hospital directors and department heads wield considerable
power, using management instruments inherited from the past. For example, in Romania, one observer noted that hospital directors are like “feudal lords” with full authority over many processes. Because hospital directors are appointed in a political process (municipal and/or national), the incumbent director has the political establishment’s support, which often motivates his actions and protects him from further scrutiny by staff, patients, or representatives of the local government or community at large.

Some countries attempted to enhance managerial professionalism and transparency by creating a management team to run the hospital. In Hungary, initially a three-member management team was appointed with a general director, a nursing director, and a finance director, but this system was quickly abolished because, as a decision-making mechanism, it proved ineffective.

Other initiatives to improve internal processes include increasing participation of hospital managers and physicians in management training programs. Some independent schools of public health and health service management have been established (the Czech Republic, Hungary, Poland), but numerous courses, diploma programs, and professional networks are calling attention to the importance of improving internal management practices.

**Market Exposure**

Market exposure determines to what extent hospitals are at risk for their performance: whether they lose revenue as they treat fewer patients and, conversely, whether they gain revenue as they treat more patients. The level of hospitals’ exposure to the disciplining force of the market is jointly determined by the provider payment mechanism and the level of direct out-of-pocket charges from patients (chapter 1, this volume). In CEE and FSU, hospitals’ formal market exposure through direct out-of-pocket payments is low because few countries have introduced official copayments. Nevertheless, the widespread practice of informal gratuity payments creates significant effective market exposure.

During the communist era, all health care, including hospitalization, was free of charge for patients. During the transition, a few
countries have defined user charges for hospital use. For example, in Croatia, patients are charged 15 percent hotel costs and a fixed flat amount, both centrally set. In Latvia, copayment levels are centrally determined as part of the health insurance benefit package. In Georgia, hospitals are allowed to charge copayments for services in the municipal benefit package. The proposed copayment levels must be submitted to the MOH annually for approval. The price list must be posted in a visible place in the hospital. In most cases, however, user fees affect marginal areas of hospital admissions. For example, in Hungary, hospitals can charge patients who arrive without appropriate referral and/or insurance coverage and can set the price.

Formal user charges, however, and their (potential) impact on hospital performance have to be evaluated in light of the informal payment practice. Lewis defines informal payments as “payments to individual and institutional providers in-kind or in cash that are outside official payment channels, or are purchases meant to be covered by the health care system.”\(^\text{18}\) Formal user charges are “crowded out” by the practice of “informal” payments. This trend jeopardizes the financial health of hospitals, since official copayments contribute to the overall hospital budget, whereas informal payments are retained by physicians and other staff members. As a result, medical equipment upgrades, innovations requiring up-front investment, cost-effective medical protocols, raising of nursing standards, and other elements of a functioning health care system lack appropriate funding.

Ministries of Finance and international donors often argue that the introduction of official copayments will automatically drive out informal gratuities. Current experience shows, however, that with low physician salaries and in the absence of enforcement, physicians waive official copayments in exchange for lower informal “gratuities”—a win-win situation for physicians and patients, but hospitals as institutions lose out.

Informal user fees make physicians directly accountable to patients and allow patients to obtain higher quality services than they would be able to purchase officially. In this sense, informal user charges create direct incentives for physicians to improve the responsiveness of their services. However, informal payments create many distortions.
For one, the purported responsiveness improvement takes place only for patients who can pay. Further, out-of-pocket payments—formal or informal—restrict access for people who cannot pay, and payment levels are usually quite arbitrary. In this sense, informal payment is a less desirable form of out-of-pocket payment than formal payment in that patients cannot be protected from the financial loss resulting from illness. Finally, the more widespread the practice, the less doctors are interested and invested in the reform of the public health care system because they have the best of both worlds: their own private business run within the safety of the public system.¹⁹

The relative weight of informal payment to public funding differs markedly in the systems we reviewed. The highest proportion in our sample was in Georgia—around 70 to 80 percent of hospital revenues derived from informal payments. This is in marked contrast with countries like Croatia, Hungary, and the Baltics, where estimates suggest that informal payments do not exceed 10 to 20 percent of total hospital revenues.²⁰ Hospitals’ market exposure, and the resulting expectation for their behavior, varied with the relative weight of public to private payments. The impact of informal payments on hospital and physician behavior is expected to be much greater in the region’s low-income countries, where public financing collapsed, than in the early-reform, higher income countries.

**Residual Claimant Status**

The organization’s residual claimant status reflects its degree of financial responsibility—both its ability to keep savings and its responsibility for financial losses (debt). A hospital’s residual claimant status is a key incentive to generate savings and efficiency gains. In the communist era, the central budget was the residual claimant: the MOH took back and reallocated any resources that hospitals did not spend. Since hospitals had no residual claims on revenue flows, coupled with input-based, line-item budgets (often with more than 30 line items), they had no incentives to generate savings and efficiency gains.

During transition, the public purse has ceased to be a residual claimant as new payment mechanisms have been introduced. As most
countries are moving toward output-based payment systems, hospitals are automatically becoming residual claimants. Moreover, hospitals are increasingly able to generate and keep their own revenue (in addition to the purchaser or central budget) through four main mechanisms: charging copayments, renting out facilities, collecting donations, and offering “corporate services” to private companies (e.g., screening).

The other aspect of the residual claimant status is the hardness of the budget. Hospitals are not held liable for their deficits as most countries have not been successful in enforcing hard budgets for hospitals. This has weakened incentives to achieve savings and efficiency gains. Hospitals in nearly all countries have run up debt, and nearly every administration has responded by a centrally arranged bailout, repeatedly in many cases. Debt was accumulated to different parties, most typically to pharmaceutical companies that had not been fully privatized (e.g., Albania), to utility companies (Croatia, the Czech Republic), and physicians (Albania, Georgia). In Hungary, hospitals accumulated debt every year from 1995. Initially, few hospital directors were replaced, and hospitals running losses continued to receive interest-free loans from central budget resources that were not paid back. To stop the process, the public finance act was amended in 1998, making owners explicitly responsible for hospitals’ financial losses, and bankruptcy commissioners have been appointed to oversee problem hospitals.

The Czech Republic has been an exception in its handling of hospital debt in line with its more market-oriented health sector strategy. Only two hospitals were offered interest-free loans from the state-owned Consolidation Bank; the others were required to repay loans from their own future savings. The Baltics are also an exception in that hospitals have not incurred any debt, primarily because inpatient care expenditures in real terms have increased. Whether this financial discipline will be maintained is questionable, as the health sector is being subjected to tighter budgets.

**Accountability**

In the socialist era, accountability was ensured by hierarchical, direct administrative control, exercised by the Ministry of Health or its
regional offices. This control consisted of, for example, financial inspections to ensure that resources were spent according to the budget line items, and the ability to hire and fire staff. Thus, accountability, like other aspects of socialist health systems, focused heavily on inputs.

With health sector reform, the MOH has been divesting its functions, including its powers of direct supervision and control. However, the new organizations that assume these functions (local governments and social insurance organizations) have been unable to develop appropriate accountability arrangements. This has created an accountability vacuum in the region.

**Accountability to owners.** As hospital owners, municipalities lack the incentives, instruments, and capacity to hold their hospitals accountable for their performance. This is the case both in terms of financial performance and service quality. The idea behind decentralized ownership was that responsibility for service delivery would be transferred closer to the people who, through the local electoral process, would assert their expectations for hospital services. This seems to be working in most countries. But the problem lies with the inability of local governments to hold hospitals accountable for their performance. Since local governments do not finance health services and usually have little control over capital investments, they lack the instruments to influence hospital behavior. Thus, their response to the complaints of their local electorate consists of putting the blame for unsatisfactory services on the central government and on purchasers for not providing adequate funding for hospitals.

For example, in Hungary, as hospitals are independent legal entities and receive their budget from the Health Insurance Fund, the municipalities, as owners, have no legal right to supervise and monitor internal hospital processes. Hospitals refuse to allow local governments to look into their activities and account books. This problem became acute in 1999 when municipalities were made legally responsible for hospitals’ financial losses.

Some countries have been experimenting with improving hospital accountability to owners by creating governance boards (the Czech
Republic, Estonia, Latvia). Whether these boards can create a meaningful link between the organization and its owner is questionable. In the Czech Republic, for instance, although the minister of health appointed board members, hospital directors were also asked to nominate people. Furthermore, the boards work on the basis of overall impressions, not hard data provided by hospitals. In Latvia, the boards of joint stock–company hospitals consist of only three people.22

Accountability to purchasers. Similar issues arise regarding accountability to funders. Ample evidence underscores the need to improve accountability to purchasers: all countries that moved to performance-based financing are encountering fraud in performance reporting. Although social insurance organizations could theoretically rely on contracts as new accountability mechanisms, contracts are not used as instruments. The contracting process is not performance-oriented: performance measures, targets, and benchmarks are not relied on and there is no selective contracting with providers. In most countries, purchasers are required to contract with all publicly owned facilities.

Hungary is an example of the weak use of contracts as purchasing and accountability instruments. Contracts specify the contracted hospital’s capacity in terms of number of beds and physician-hours provided but remain silent on volume, service mix, and quality even though payments to hospitals are based on their output (DRG basis).

Even the more market-oriented reformers have shied away from relying on performance pressure from purchasers. In the Czech Republic, insurers were initially required to contract with any hospitals that applied for a contract. Since 1995, selective contracting has been allowed in theory. In practice, however, contracting decisions are not made by insurers but by a committee of health insurance fund representatives, the MOH, the Chamber of Physicians, and the Hospital Association. No contracts have been withdrawn or refused, and only some marginal shifting of services has occurred. In Romania, how new legislation translates into practice will be interesting to see because it explicitly allows selective contracting and attempts to ensure sector neutrality by allowing insurance houses to contract with private as well as public providers. Hungary had difficulty imple-
menting sector neutrality for lack of any clear guidelines on contracting with private sector providers.

Such inconsistencies result from the difficulty of moving from central planning of inputs to proactive purchasing, based on outputs and performance targets. This requires institutional adjustments in rules and regulations, capacity building, and change in public sector culture and norms.

**Accountability to the Ministry of Health.** Quality assurance and minimum standards are in the early stages and, although they have become catchwords, most countries are unsure how to use such instruments. In Hungary, physicians defined minimum standards and, in the first inspection, most hospitals and departments did not meet them. Since bringing all of them up to the level of the defined standards (for equipment, access to laboratories, and the like) would have been too costly, the issue has been temporarily taken off the agenda.

**Accountability to patients.** Structures for accountability to patients are lacking, since there are no accessible procedures for formal patient complaints. The exception again is the Czech Republic where dealing with the increased number of patient complaints is one of the main new tasks of the Ministry of Health. Since none of these countries has created systems where funds flow in response to patient demand, they have funding systems that do not increase accountability to patients.

**Social Functions**

Social functions in the communist era were unfunded and implicit. These social functions included hospitalizing nonmedical cases such as dependent elderly people. With increased financial pressure, these traditional functions are gradually disappearing, but unfunded and implicit social functions are appearing in new forms. For example, while health insurance is compulsory in most countries, many people fall through the social safety net. Although their number may be small, there is no information on what happens to them. In the
Czech Republic, hospitals incur the cost of treating people without insurance. In Romania, the recent insurance legislation assumes that everyone is covered, but this is not the case. Hospitals in lower income countries bear the cost of social functions in a different way: hospital budgets are often delayed for months, and physicians continue to work without pay. In some sense, in these consistently underfunded systems, all hospital services have become social services—with volumes unspecified and services delivered at the discretion of the staff.

Summary of Organizational Structure

As table 5.3 attempts to illustrate, hospitals in the reviewed CEE and FSU countries no longer function as direct budgetary units of the core public sector bureaucracy, as some change occurred in the five key elements of their organizational structure. At the same time, the current organizational structure of these hospitals cannot be clearly labeled, for lack of consistency in their five key organizational features. The resulting inconsistency in their overall incentive regime has contributed to their limited success in improving their performance.

Although hospital autonomy has increased in various decision areas, additional regulations and/or political pressures have limited the decision rights of hospital managers in practice. Social functions have not changed much either, as hospitals continue to provide unfunded social functions. In contrast, residual claimant status, market exposure, and accountability structures have undergone significant changes. The public purse has ceased to be the residual claimant of savings, unspent allocations, and efficiency gains, at least under the new payment mechanisms. The increase in informal payments has created some elements of market exposure, though in a distorted form.

But perhaps the most striking feature of the current organizational structure is the lack of effective accountability mechanisms. As the nearly empty accountability row in table 5.3 suggests, most countries do not enforce direct accountability through the hierarchy or through explicit regulations and contracting. The changes in
Table 5.3 Internal Incentive Environment during Transition

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<th>2</th>
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<tr>
<td>Decision rights</td>
<td>Few</td>
<td>AL, KA1</td>
<td>RO, CZ, HU, CR,</td>
<td>ES2&amp;3</td>
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<td></td>
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<td>GE, ES1, KA2, LA,</td>
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<td></td>
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<td>II, PO</td>
<td>Full autonomy</td>
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<td>Residual claimant</td>
<td>Public purse</td>
<td></td>
<td>AL, RO, HU, CR,</td>
<td>ES2&amp;3, KA2</td>
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<td>ES, CZ, KA1, ES1,</td>
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<td></td>
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<td></td>
<td>GE, PO, LA, LI</td>
<td>Organization</td>
</tr>
<tr>
<td>Market exposure</td>
<td>None</td>
<td>AL, RO, HU, CR,</td>
<td>KA2, GE</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>PO, ES1&amp;2&amp;3, KA1,</td>
<td></td>
<td>At full risk for performance</td>
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<td></td>
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<td>CZ, LA, LI</td>
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<tr>
<td>Accountability</td>
<td>Hierarchical direct control</td>
<td>AL, GE</td>
<td>CZ</td>
<td>Regulation and contracting</td>
</tr>
<tr>
<td>Social functions</td>
<td>Unfunded mandate</td>
<td>AL, RO, HU, CR,</td>
<td>CZ, KA2</td>
<td>Funded explicit mandate</td>
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<td>GE, ES, PO, LA,</td>
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AL Albania, CR Croatia, CZ Czech Republic, ES Estonia, GE Georgia, HU Hungary, KA Kazakhstan, LA Latvia, LI Lithuania, PO Poland, RO Romania.

Note: Estonia has three types of hospitals. ES1 refers to hospitals operated as municipal institutions, ES2 refers to hospitals operated under joint-stock company law, and ES3 refers to hospitals operated as trusts. Kazakhstan has two types of hospitals: KA1, state run, and KA2, operated as health enterprises.
the external environment removed several decision rights from the Ministry of Health, including its powers of direct supervision and control. The new organizations that received these decision rights have been unable or unmotivated to develop appropriate accountability arrangements.

**Implications for Hospital Behavior and Performance**

The changed external environment put new pressures on hospitals to adapt their behavior. Reduced real budgets and new provider payment mechanisms were expected to trigger efficiency gains, while decentralized governance was expected to improve responsiveness to community needs and user expectations. However, because the organizational structure was inconsistent with the external environment, incentives for behavioral change have been weak and contradictory, and potential synergies have been lost.

The incoherence between internal and external incentive environments has had three manifestations. First, decentralization blurred the governance structures. The operational meaning of local government ownership and governance has remained unclear in social insurance–funded systems. In terms of funding, local governments have played a small role, as hospitals’ operating expenditures come from social insurance receipts, and capital investment allocations come mainly from the central budget and only to a limited extent from local government budgets. Thus, in terms of financial responsibility, local governments are limited in their ability to influence hospitals’ strategic development.

The legal status of hospitals under local government ownership is a further complication. When social insurance organizations were established and required to contract with hospitals, hospitals needed to be granted legally independent status to sign binding contracts and to act as legally recognizable contracting partners. At the beginning of the transition, they did not have this independence as budgetary units of the core government bureaucracy. This dilemma over the meaning and enforceability of contracts between two public bod-
ies provided the opportunity to systematically rethink hospitals’ organizational form and governance structure. Nevertheless, few countries gave attention to this issue, and most did not develop new laws regarding hospital governance. Instead, the issue was quickly addressed under existing laws designed for the governance of general nonprofit organizations and state-owned companies. As a result, hospitals were turned into extrabudgetary funds, nonprofit institutions, and state-owned enterprises, regardless of whether these forms and existing regulations were appropriate for the health sector.

The second manifestation of incoherent external incentives and organizational structure is the misalignment between incentives and decision rights. Decision rights were not transferred to the organizational level that would benefit from introducing behavioral change: hospitals had incentives to change their behavior but not the instruments. Anticipation of greater (technical) efficiency was based on the expectation that hospitals would respond to new payment incentives and financial pressure by reducing excess physical and human resource capacity. These two inputs are the most significant for savings and efficiency gains. Personnel expenditures make up 60 percent of all health care costs in the region’s middle-income countries, while physical capacity determines most fixed costs. Since hospitals had no decision rights over physical capacity and were limited in their decision rights over human resources, the expectation that hospitals would reduce their inputs to produce the same level of output was unfounded.

In contrast to hospitals, local governments do have decision rights over physical assets, but they lack incentives to divest or manage them well. Closure of a local hospital appears to the local electorate as a loss of community assets and as a local government failure to fulfill its legal (sometimes constitutional) mandate to deliver services. As a result, old patterns of focusing on inputs persist, despite changes in external structures and increasing financial pressure.

Finally, hospitals do not incur costs for not adjusting their operation and performance. The interaction between the lack of market exposure and the lack of accountability structures created an incentive environment that did not penalize poor hospital behavior and performance. Repeated government bailouts of debt-ridden hosp-
tals, lack of monitoring of financial and nonfinancial performance, lack of reporting requirements, and the absence of any exit threat meant that hospitals could continue their previous patterns of behavior without paying any penalty. They were rewarded, however, for improved performance in that they could keep savings and efficiency gains. As a result, behavioral improvement depended on the hospital managers’ drive and entrepreneurial spirit.

**Conclusions**

**Coherence with Other Reforms**

Based on this review, we looked only at the extent to which organizational reform in the hospital sector of the higher income countries has been consistent with other reforms introduced during the transition. As mentioned, the main health sector reform elements in these countries included the establishment of social insurance with performance-based provider payment arrangements and explicit contracting with decentralized providers. The rationale for introducing payment reforms before organizational reforms was that hospitals would respond to the new provider payment incentives by becoming more efficient and would curtail their use of inputs. However, the current organizational structure of many hospitals does not allow them to respond optimally to the incentives introduced through the funding reforms. Some restrain (limited decision rights) while others undermine hospitals’ ability to respond appropriately to the new provider payment mechanisms (soft budgets, market exposure through informal payments, lack of accountability).

The consistency of hospitals’ current organizational structure with local government ownership is a more complex issue. Local governments’ role as owner is not well defined, and their control over hospital operations is limited. They have a key function and opportunity, however, in terms of their decision rights over their hospitals’ physical assets. As various (unsuccessful) attempts to close hospitals have demonstrated, local governments value these assets for reasons other
than the hospitals' performance and may oppose organizational reform that would reduce their control over these assets. A key issue here is that the more assets a local government has, the bigger its running budget must be to maintain them. Since money translates indirectly into political power, the incentive to downsize is small under the current organizational arrangements.

**Coherence with Capacity to Implement Change**

In chapter 1 of this volume, the authors point out that organizational reforms are often complex and require a sophisticated policymaking and implementation capacity to design and carry through. While education levels in CEE and FSU are high, policymakers and staff often lack the relevant experience, training, and background for the type of reforms needed during hospital corporatization. Furthermore, the last decade has left many CEE and FSU policymakers and citizens with reform fatigue and skepticism about new initiatives. Thus, a challenge to structural reform is not greeted with much enthusiasm. Nevertheless, the promise of new opportunities could appeal to the medical profession, which feels that it has not fully benefited from the transition to a market economy.

We offered a number of hypotheses to explain the lack of attention to the organizational structure of hospitals in the CEE and FSU countries. We also suggested that the failure to address these issues has slowed or blocked efficiency gains. Though organizational reforms are complex and challenging to design and implement, it is clear that many of the countries in this region will find them a necessary component of the next phase of their health sector development.

The countries where health financing and provider payment reforms are well under way (e.g., Croatia, the Czech Republic, Hungary) are likely to find themselves considering such reforms in the near future. More groundwork is probably needed in other countries (e.g., Albania, Bulgaria, Romania). More moderate hospital autonomy may be a way for these countries to ease into a progressive reform process for their hospitals. In low-income countries, where the priority is to mobilize resources for the sector and to rebuild pre-
payment plans, complex organizational reforms are probably ill advised in the near future.

For countries contemplating hospital organizational reform, the key issues to address include aligning incentives and decision rights, enforcing hard budgets, and introducing new accountability mechanisms through more effective use of contracts, quality assurance, and performance monitoring. This will necessitate clarifying the expected future ownership role of local governments and completing the transition to a more proactive health-service purchasing model. Finally, reorienting the capacities of the Ministries of Health to fulfill a strategy-setting stewardship function is essential for the success of any kind of health reform in the region.

Notes

1. Throughout this text, we use *transition* to mean the process of moving from a centrally planned, largely state-owned economy to a market-based economy. By *transition economies*, we mean all countries of the former communist block in CEE and FSU. By *transition period*, we mean the time from 1990 to the present.


4. The 11 countries reviewed include: Albania, Croatia, the Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Latvia, Lithuania, Poland, and Romania.


6. Ho, “Hospital Restructuring in Central Eastern Europe and the Former Soviet Union.”


8. Ho, “Hospital Restructuring in Central Eastern Europe and the Former Soviet Union.”

9. J. Langenbrunner and M. Wiley, “Paying the Hospital: Payment Policies and Reforms in Eastern Europe and the Former So-


16. Historically, control and accountability over the use of inputs in accordance with the plan were relatively strong—but there was virtually no scrutiny or accountability for the operation of the hospital, the quality of care, or the delivery of outputs.


19. Ibid.


21. Langenbrunner and Wiley, “Paying the Hospital.”

22. Given the general lack of functioning accountability structures for hospitals throughout the region, research on the potential and actual effectiveness of boards in enhancing accountability is needed.
Throughout the 1990s, several Latin American governments—including Argentina, Brazil, Chile, Colombia, Costa Rica, Mexico, Panama, and Uruguay—have undertaken reforms to the organization of and payment for the delivery of hospital services. Both the public and governments have sought change. The public has felt that public hospitals offer too little choice, do not respond to patients’ needs, and often deliver poor-quality care. Governments face rising expenditures, with no corresponding growth in productivity, efficiency, quality—or public satisfaction.

Traditionally, public hospitals and ambulatory networks in Latin America have cared for the poor and have been used by the middle classes for care that could result in catastrophic expenditures. Ensuring adequate governance of public hospitals has been difficult because they have had ill-defined and conflicting objectives and weak and input-focused accountability mechanisms. As a result, many public hospitals have been inefficient and their service quality, poor.

Under tight fiscal constraints and public pressure, Latin American governments have emulated the “marketizing” organizational reforms undertaken in several OECD countries.

This chapter reviews the early experiences of Argentina, Chile, and Uruguay with this type of reform, and attempts to shed light on the varied levels of success with implementation. Though it is too
early to evaluate the impact of these reforms, information about the evolution of some production and efficiency indicators are presented wherever available.

**Case Studies**

The conceptual framework developed in chapter 1 is utilized to make cross-country comparisons easier.

Argentina, Chile, and Uruguay were among the first Latin American countries to engage in the organizational reforms of hospitals. Because they are geographically and culturally close, significant exchange of experiences took place, as illustrated by the cases described. Although they embarked on reforms with the same overall objective, reform progressed further in Argentina than in Chile or Uruguay. This chapter explores why implementation was more successful in one country than in the others.

**Argentina**

The organizational reforms initiated by the federal government in 1993 were a response to the following issues:

- Increasing demand for hospital services by the uninsured, due to an increasing number of unemployed and the consequent reductions in coverage by social insurance;¹

- Additional demand by beneficiaries of poor or poorly managed social insurance funds (*obras sociales*), who preferred the public hospitals to low-quality/copayment private services;

- Lack of reimbursement of hospitals by social insurance funds for services rendered, thus creating a subsidy to the social insurance funds from the public purse—and straining further the resources available to ensure access and quality for uninsured patients;

- Highly centralized, rigid hospital management. Despite previous decentralization efforts (from the federal to the provincial level),
hospital management remained very centralized and rigid. This rigidity was believed to be a major determinant of the performance problems, especially problems related to changing health services to meet new/different demands, allocation of resources, management of personnel, purchasing, contracting, governance, and the like.

Reforms

There were a few experimental efforts with organizational reform as far back as 1966. The National Pediatric Hospital Dr. Juan Garrahan and the Clinics Hospital José de San Martín are examples of these early attempts and will be described below. But the strong legislative push for far-reaching hospital reform did not come until the 1990s.

In 1993, the Federal Government of Argentina initiated several changes to these problems, including organizational reform of the public hospitals, increasing decision rights of hospital administrators, exposing public hospitals to some degree of market risk, allowing hospitals to claim locally raised revenue and establishing new accountability systems.2

Decision rights. Self-managed public hospitals (SMPHs) would control their operative plan and annual budget and could propose new services and programs, enter into contract agreements with health insurance carriers, contract-out services, and designate, promote, and transfer personnel within an agreed structure according to their jurisdiction. All these rights and responsibilities were to be performed at the hospital level, thus removed from the Ministry of Health.

Market exposure. SMPHs would start to raise an additional portion of their income from the delivery of services to insured patients.3 The hospital would continue to receive the bulk of its income from the provincial budget. In addition, the law envisioned a shift from historical-based budgeting of inputs to funding of outputs delivered to public patients (through the establishment of provincial health
insurance funds)—so that patients’ choices as to where they would go for treatment would bring resources with them. In other words, money was intended to reimburse those services actually demanded, instead of what was “offered.”

**Residual claimant.** SMPHs would be allowed to collect fees from insurers and through the workers compensation scheme and charge copayments to patients with the ability to pay. This revenue was to be divided, according to a provincial law, among personnel, investments, and operation, to motivate their performance and hence production and efficiency gains.

**Accountability.** Given the planned delegation of some substantial decision rights, it was necessary to create accountability mechanisms that would work even with reduced influence over the day-to-day operation of the hospitals. To this end, the reform included the following provisions:

- The functioning of a board of directors (consejo de administración), which would supervise the general performance of management and the hospital overall
- The requirement that each reformed hospital would have to meet minimum targets for production, efficiency, and quality, which the program would establish for each category
- The requirement that each hospital would have to approve the periodic evaluation of efficiency control and quality that the authority defined.

**Social functions.** SMPHs would continue to serve primarily the poor and uninsured.

As noted above, the intention was to move toward the establishment of provincial health funds—which would reimburse hospitals for services provided to public patients. No mechanism was outlined for funding of research or training (the decree mentions that the hospital would continue to receive its budget, in part for these activities),
though SMPHs were clearly intended to continue to provide these services.

Because public hospitals belong mainly to provinces and some municipalities, the federally legislated reform design was implemented quite differently in various jurisdictions. In such provinces as Entre Ríos, Formosa, La Rioja, San Luis, Santiago del Estero, and Tucumán most hospitals remained in essence organizations; in provinces such as Salta, public hospitals have been almost corporatized.

Corrientes, Catamarca, La Pampa, Mendoza, and Río Negro have made their most important hospitals autonomous organizations. In the area of management control, most self-managed hospital administrators in these provinces gained good control over nonlabor inputs. They can move or promote staff within a set framework and promote voluntary retirement, although they cannot contract with or dismiss staff. They can rent facilities or subcontract services but cannot acquire or sell assets. Though professing a desire to move to demand- and production-based budgets, these provinces have kept their historically based budgeting systems. All have promoted cost recovery for services provided to mandatory and voluntary health insurance beneficiaries and have allowed hospitals to retain up to 80 percent of these revenues to distribute among investment, maintenance, and staff performance bonuses. All have set administrative and technical boards and have appointed general managers, but the composition of such boards and the rules to nominate boards and managers still make them dependent on the political process and cycle. Most have developed management contracts templates, including performance indicators, but only Río Negro actually got these agreements with its self-managed hospitals, and tied the distribution of staff performance bonuses to meeting agreed targets in successive quarters. Finally, social functions are either not mentioned or not funded. The provinces of Buenos Aires, Entre Ríos, and Santa Fe have passed similar legislation but have been slow or inconsistent in implementation.

Salta and San Juan have passed the most far-reaching hospital reform legislation. Under the new rules, self-managed hospitals would become what we could classify as corporatized organizations.
Table 6.1  Self-Managed Hospital Autonomy in Argentina

<table>
<thead>
<tr>
<th>JURISDICTION</th>
<th>IMPLEMENTATION</th>
<th>DECISION RIGHTS</th>
<th>MARKETLIKE ENVIRONMENT (PERCENT)</th>
<th>CLAIM ON REVENUE (PERCENT)</th>
<th>ACCOUNTABILITY</th>
<th>SOCIAL FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Buenos Aires</td>
<td>City-wide</td>
<td>Budgetary</td>
<td>3</td>
<td>97</td>
<td>No contract</td>
<td>Not explicit</td>
</tr>
<tr>
<td>Buenos Aires Province</td>
<td>Province-wide</td>
<td>Autonomous</td>
<td>7</td>
<td>93</td>
<td>No contract</td>
<td>Not explicit</td>
</tr>
<tr>
<td>Corrientes</td>
<td>H. Juan Pablo II</td>
<td>Autonomous</td>
<td>9</td>
<td>91</td>
<td>No contract</td>
<td>Explicit</td>
</tr>
<tr>
<td>La Pampa</td>
<td>Province-wide</td>
<td>Budgetary</td>
<td>11</td>
<td>89</td>
<td>With contract</td>
<td>Not explicit</td>
</tr>
<tr>
<td>Mendoza</td>
<td>H. Lago-Maggiore</td>
<td>Autonomous</td>
<td>10</td>
<td>90</td>
<td>No contract</td>
<td>Not explicit</td>
</tr>
<tr>
<td>Misiones</td>
<td>Province-wide</td>
<td>n.a.</td>
<td>7</td>
<td>93</td>
<td>No contract</td>
<td>Not explicit</td>
</tr>
<tr>
<td>Rio Negro</td>
<td>Average</td>
<td>Budgetary</td>
<td>20</td>
<td>80</td>
<td>With contract</td>
<td>Not explicit</td>
</tr>
<tr>
<td>Salta</td>
<td>H. San Bernardo y Orán</td>
<td>Corporatized</td>
<td>10–20</td>
<td>80–90</td>
<td>With contract</td>
<td>Explicit</td>
</tr>
<tr>
<td>San Juan</td>
<td>Province-wide</td>
<td>Budgetary</td>
<td>4</td>
<td>96</td>
<td>With contract</td>
<td>Explicit</td>
</tr>
<tr>
<td>Santa Fe</td>
<td>H. Baigorria</td>
<td>Autonomous</td>
<td>14</td>
<td>86</td>
<td>No contract</td>
<td>Not explicit</td>
</tr>
<tr>
<td>Tucumán</td>
<td>Province-wide</td>
<td>Budgetary</td>
<td>17</td>
<td>83</td>
<td>No contract</td>
<td>Not explicit</td>
</tr>
</tbody>
</table>

n.a. Not applicable.
new legislation: (1) legally establishes these hospitals as public trusts, operating under both private and public law, in which they become the full trustees of all assets and personnel; (2) sets a mechanism to switch, over a period of three years, from historical budgets to demand-driven budgets (box 6.1); (3) creates independent hospital managers, with fixed-term contracts, accountable to a hospital board and independent from the political cycle; (4) provides for management contracts that include performance indicators covering production, efficiency, and quality of care (e.g., targets for number of consultations, discharges, surgeries, emergency room visits); (5) gives the hospital full claim to the revenue generated at the hospital and power to incur debt (after authorization by the Provincial Ministry of Health); and (6) makes explicit, and funds, some of its social functions.

The extent of decision rights delegated to management varies widely within the autonomous organization category. Alvarez and Prieto developed a highly precise hospital autonomy index, composed of six categories of decision rights. Their index allows greater differentiation within the category “autonomous,” and is being applied to monitor the evolution of reformed hospitals.

None of these reforms has been in place long enough to measure its impact on process or output. Information is available only on the revenue generated by cost recovery. Invoicing, though still generally poor, is improving. Collection rates are low, despite the automatic collection system. Revenues from cost recovery are typically around 10 percent of the hospital budget but can be as low as 3 percent or as high as 30 percent at tertiary hospitals such as Dr. Juan Garrahan and José de San Martín. These revenues have become important sources of financing investment and maintenance. They also offer staff strong financial incentives to adopt new policies and standards of care (in some hospitals, these nonsalary bonuses can amount to 50 percent of the doctor’s total income).

**Chile**

Chile’s public hospital system was run as government departments prior to the reform, though at the regional level. Chile opted to im-
Box 6.1 From Direct Public Hospital Budget Allocation to Nonbudgetary Revenue

Chile and Argentina chose two different methods to help public hospitals move from historical budget allocations based on inputs, to demand-driven revenues based on outputs.

In Chile, the new health service cost-accounting system, based on services provided, was introduced in 1996. It generated an output-based “shadow budget,” which reflected what the hospital would have earned if all of its revenues came from services provided to persons insured privately or by Fonasa. In some hospitals the shadow budget was larger than the historical one, while in others the reverse was true. Over a period of years, that gap was supposed to be eliminated by freezing budgets for regional health services that received more than they would have earned for services rendered and by allowing budget growth for other services that would have earned them more had the new system been in place. As the gap approached zero, health services would be switched from the input-based historical budget to the demand- and production-based budget. Although the shadow budgets have been operating for four years, no hospital or health service has yet been switched to the new budgeting mode, and the gap has been allowed to grow, instead of being forced to shrink.

In Salta province, Argentina, historical budget allocations are to be reduced over three years, starting in January 1999, by 10 percent, 50 percent, and 90 percent, respectively. The revenue gap will be offset by charging the provincial government for services provided to the uninsured poor. Hospitals will charge the provincial government on the same fee schedule it uses to charge the obras sociales and private insurers, and will be reimbursed 10 percent of charges in the first year, 50 percent in the second year, and 90 percent after the third year. By then public hospitals will have reached about 90 percent of market exposure.
plement the reform as the level of the regional health administration (RHA). In this sense the reform resembles somewhat the Victoria, Hong Kong, or Singapore models of establishing a group of health providers as an autonomous network, with subsequent government supervision focused on the headquarters rather than the hospitals.9

Reform Implementation

The Ministry of Health has established management contracts with RHAs, which can function as an indirect accountability mechanism for autonomous hospitals. In Chile, however, these contracts resemble ministerial planning documents more than business contracts, and many regional health service administrations and some hospitals have become more autonomous organizations. The reform model is fairly “mild.” Nevertheless, the RHAs have become somewhat more autonomous organizations.

Decision rights. RHAs have been granted significant control over nonlabor inputs (i.e., procurement) but have little influence over selection, hiring, moving, promoting, or dismissing staff. Also, coverage and the scope of activities delivered continue to be set by the MOH, and the manager cannot dispose of any assets or revenue generated in the region or hospital. Before the reform, all these decisions were centralized at the MOH.

Market exposure. While the MOH does contract with some RHAs, most continue to be financed primarily through direct budget allocations, based on inputs and historical trends. Labor continued to be funded directly from the budget. They may charge private health insurance carriers and the National Health Fund for services provided to their beneficiaries and can charge copayments to all but the poorest uninsured patients. In reality, however, relatively little is collected from either source. In the past few years, the government has set up a shadow budget system based on: payment per production for most services rendered by the public hospitals and ambulatory clinics; diagnosis-related groups for about 25 clinical conditions, 11 of them
needing complex medical interventions that result in catastrophic health care expenditures; and capitation for general ambulatory care provided by municipal health services. The shadow system would allow private insurers to compensate public hospitals for services provided to its beneficiaries and make the public money follow the patient. However, no decision has been made to implement the system. While hospitals know how much they would receive if exposed to the market, they still receive direct budget transfers, as the transition to the new budget system has not yet taken place.

**Residual claim on revenue.** RHAs have no claim on any revenues they earn by charging private health insurers, or from collecting copayments. Cost-recovery revenues are about 10 percent of total public health expenditures. This should not come as a surprise, as hospitals and health services are not allowed to keep any of the revenue generated and therefore have no incentive to correctly identify insurance beneficiaries, or to collect from patients. Patients themselves have no incentive to identify themselves as insured, as that would require them to pay both a deductible and a copayment, but they pay nothing if they are not identified insured patients. In case of a deficit, the public purse is ultimately responsible, meaning that the ministry covers the difference between the planned and actual expenditures. Hence, the administrations also are not residual claimants on deficits.

**Accountability.** RHA management personnel have remained civil servants, directly appointed and supervised by the government. Their activity is framed by the “management agreements.” However, they continue to be directly regulated by the MOH.10 The agreement, which resembles a planning-by-objectives document, is quite different from a typical hospital management agreement. In 1995, the standard agreement included 55 objectives and indicators, covering mostly processes to implement government public health policies and regulations. These stipulations include some of the usual health service production, efficiency, or quality-of-care indicators (e.g., shorten waiting lists, improve use of surgical units, reduce ab-
senteeism, adopt quality-of-care standards resulting from evidence-based medicine). This planning instrument is for the most part produced centrally, at the MOH. Regional health service or hospital managers are “consulted” but have relatively little negotiating power in the agreement process. There is no incentive mechanism to facilitate meeting the objectives or targets—financial or other—and in the case of noncompliance, no penalty is imposed. Several health service managers have defied the MOH by refusing to sign the proposed agreements, and none of them was disciplined or removed. Investment in the management information systems has been insufficient to allow adequate monitoring of the proposed targets and indicators.

**Social function.** Social responsibilities of the RHAs are laid out in great detail in the management agreement, but the annual health service budget does not specifically address their funding.

It is too soon to judge the impact of this mild variant of network autonomization on the public health system’s production and efficiency. Some broad analysis seems to suggest the following: production has increased between 2 percent and 4 percent annually; since the implementation of agreements, fiscal delinquency among the regional health services has decreased to between 15 percent and 30 percent, compared to 100 percent before the agreements; and systemic indebtedness has continued to grow, despite the introduction of management agreements.\(^\text{11}\) No causal relationship can be inferred, however, because public health expenditure financing grew steadily even as management agreements were being introduced. This could explain the increase in health care utilization and the decrease in health service deficits.

**Uruguay**

Most public hospitals in Uruguay are budgetary organizations, run as MOH departments. The government of Uruguay chose to pilot a reform model established within a “broader” interpretation of the existing public hospital legal framework. This arrangement empow-
<table>
<thead>
<tr>
<th>COUNTRY / JURISDICTION</th>
<th>DECISION RIGHTS</th>
<th>MARKETLIKE ENVIRONMENT</th>
<th>CLAIM ON REVENUE</th>
<th>ACCOUNTABILITY</th>
<th>SOCIAL FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>Functional autonomy. Control over nonlabor inputs</td>
<td>Historical budget with plans to move to demand-driven budget, but no clear mechanism for transition. Ten percent of budget from cost recovery</td>
<td>Sixty-six percent of cost recovery revenues retained for maintenance, investment, and bonuses. No responsibility for debts</td>
<td>Not-so-independent board and director. Management contracts with bonuses tied to performance indicators</td>
<td>Not explicit</td>
</tr>
<tr>
<td>autonomous hospital case—Río Negro</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Argentina</td>
<td>Public trust. Full control of all assets and personnel</td>
<td>Three-year transition for demand-driven budgeting. Ten percent of budget from cost recovery</td>
<td>Full claim on revenues. Potentially responsible for debt. To be tested in practice</td>
<td>Independent administrator. Management contracts with bonuses tied to performance indicators</td>
<td>Explicit and funded</td>
</tr>
<tr>
<td>corporatized hospital case—Salta</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chile</td>
<td>Partial control over nonlabor inputs</td>
<td>Historically based budgeting. Shadow system based on production and DRGs not implemented</td>
<td>None</td>
<td>Management by objectives. No sanctions</td>
<td>Explicit. Proposal for separate financing</td>
</tr>
<tr>
<td>Uruguay</td>
<td>Able to nominate, dismiss, and promote staff but not change staff mix. Control over nonlabor inputs</td>
<td>Direct historically based budget allocation</td>
<td>Can retain up to 80 percent of revenues for maintenance and investment. No provisions for debts</td>
<td>Management agreement with performance indicators. No provisions for noncompliance</td>
<td>Explicit and funded. Services targeted toward poor</td>
</tr>
</tbody>
</table>

DRGs: Diagnosis-related groups.
ered four general hospitals with some degree of management autonomy: Maldonado, Salto, Tacuarembo, and Las Piedras.

The environment for reform is particularly challenging in Uruguay. No significant reform of health care financing or administration has taken place in the past few years. In 1997, the government of Uruguay passed a decree that granted some autonomy to all hospitals. Two weeks later, bowing to pressure from the provincial social insurance carriers and the provincial medical associations, the government withdrew the decree. The insurers and the medical profession feared the proposed changes meant a semiprivatization of the public hospitals, which would compete for their patients.

Following this setback, in 1999 the government opted to implement the pilot reforms noted above. The pilots delegate some decision rights to four public general hospitals through management agreements, applying a more flexible interpretation of existing legislation.

**Reform as Implemented**

The reform as it was implemented is described below.

*Decision rights.* The managers have been given the power to nominate, promote, and dismiss staff but not to change the staff mix (quotas by category). They do have 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 continue to be financed through input-based, historically set budgets, but now rely also on revenues earned through charges to private and social health insurance carriers for services provided to their beneficiaries. Each pilot hospital is given both the prerogative and the responsibility of preparing a draft budget, to be negotiated with the Administration of Public Health Services (a department within the MOH) based on expected output.
Residual claims. Pilot hospitals are allowed to collect fees from the beneficiaries of social and private insurance and may keep up to 80 percent of revenues for investment and maintenance, though not for redistribution among staff. They now have quite a bit of discretion in executing the budget— savings in one budget-line area can be re-allocated to another. Though there are no special provisions for what would happen if a deficit occurred, the operating assumption is that the Administration of Public Health Services would cover the loss.

Accountability. Pilot hospital managers are now appointed and supervised by the Administration of Public Health Services, with which they have entered into management agreements. These agreements include performance indicators covering output or productivity, input/output or efficiency, and process quality (table 6.3).

Social functions. The mandate to provide for the poor and for other social functions has been explicitly specified in the management contracts. Hospitals do not receive any funds based on these services. However, hospital performance indicators are based exclusively on services provided to the poor and uninsured, thereby focusing management responsibility on that population. Services rendered to insured patients will not count in each hospital’s evaluation unless the hospital fails to recover cost from insurers. Though very preliminary, a review of the change process carried out in November 1999 showed a significant improvement in the four pilot hospitals’ production and efficiency indicators, which was not matched by other nonpilot hospitals. It is not yet possible to evaluate any impact on service quality.

Table 6.3 summarizes the use of performance indicators in management contracts in these three case study countries.

Organizational Change Process

Despite the pervasive experimentation with marketizing organizational reforms, most public hospitals in the Southern Cone are still...
<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>INPUTS</th>
<th>PROCESS</th>
<th>OUTPUTS</th>
<th>OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coverage and equity</td>
<td>Inhabitants/doctor</td>
<td>Proportion of patients identified as insurance beneficiaries</td>
<td>Number of general, specialized, and ER medical consultations</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Inhabitants/nurse</td>
<td></td>
<td>Number of hospital admissions and patient-days, per type of services (e.g., intensive care)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Number of deliveries and different surgical interventions</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Coverage for immunization, dental health, and cervical screening</td>
<td></td>
</tr>
<tr>
<td>Allocative efficiency</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Internal efficiency</td>
<td>Bed occupancy rate</td>
<td>None</td>
<td>Average consultation time</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Surgical suite occupancy rate</td>
<td></td>
<td>Number of consultations per doctor, per office, per unit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Absenteeism per professional category</td>
<td></td>
<td>Average length of stay for different units, pre- and postsurgery</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Medical and nursing hours/bed-days</td>
<td></td>
<td>Number of surgical interventions per surgeon per month</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Generalist doctors/specialists</td>
<td></td>
<td>General medical consultations/spécialized consultations</td>
<td></td>
</tr>
</tbody>
</table>

(Table continues on the following page)
<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>INPUTS</th>
<th>PROCESS</th>
<th>OUTPUTS</th>
<th>OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of care</td>
<td>Proportion of personnel who attended training, by type of training and professional strand</td>
<td>Waiting lists for different general and specialized consultations, laboratory and image tests</td>
<td>Proportion of urgent consultations</td>
<td>Hospital infection rates per service</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Proportion of completed medical records for inpatients and outpatients</td>
<td>Proportion of ambulatory surgeries</td>
<td>Hospital and service fatality rate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Proportion of medical records reviewed by quality assurance committee</td>
<td>Proportion of cesarean sections</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Proportion of patients surveyed on satisfaction</td>
<td>Proportion of “urgent” consultations</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Number of prescriptions, tests, and imaging per consultation, per admission, and per inpatient day</td>
<td>Proportion of “urgent” surgical interventions</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Proportion of patients referred from ambulatory clinic and hospital to other services</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Proportion of mothers with full prenatal care, who had first visit in first trimester, who had tetanus immunization, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial sustainability</td>
<td>Direct costs per service</td>
<td>Proportion of services rendered that were invoiced</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Personnel expenditures/total budget</td>
<td>Proportion of collected invoices</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cost recovery/total budget</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deficit or surplus/total budget</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Debt</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
run as government departments. In Argentina, reforms have gone farther than elsewhere, but even there, the reforms described have been implemented in no more than 50 out of more than a thousand public hospitals.

The halting implementation can partially be explained by the context in which the reforms were introduced and the process by which the reform was implemented.

**Context**

As noted above, the reforms initiated in the three countries were similar in nature. In some regards, the institutional structure of the health systems was similar also. However, in terms of the institutional and political context, there were large differences.

In Argentina, the federal reform legislation was passed without major political opposition during President Menem’s first administration (1991–95) in the context of a sweeping reform of the state’s role. Privatization of public enterprises and utilities and other market-oriented reforms introduced at that time led Argentina to strong and sustained economic growth over the 1990s. Thus, the general context was relatively favorable. However, the hospital reforms were more difficult to implement than other public sector reforms because public hospitals were owned by subnational (mainly provincial) governments. The degree of interest in and commitment to these reforms at the provincial level varied greatly. Even provinces committed to the reforms found themselves held back by looming fiscal crises requiring increased budgetary scrutiny and fiscal discipline. Thus, both attention and funds were relatively unavailable. Provincial treasury officials appeared reluctant to loosen financial control, perhaps due to uncertainty regarding the controls included in the reform design.

In Chile and Uruguay, legislation for hospital autonomy reform was even more difficult to pass and implement. One reason for the difficulty may be that the reform was introduced by Center-Left coalition governments, which rely heavily on the support of labor and public employee unions. In addition, health reform was pro-
posed as an isolated sector reform, not as part of a sweeping and broad range of other public sector reforms, as was the case in Argentina. Professionals, provider associations, and the political Left all fought reform on the following grounds: cost recovery would reduce access by the poor; revenue rights would lead to a two-tier system, as public hospitals would have incentives to give paying patients preferential service; hospital autonomy and competition would destroy health care networks and provide an incentive for excess supply and duplication, leading to a disjointed and costly system; public hospitals would unfairly compete with the private sector; and hospital autonomy was a first step to the privatization of public hospitals and would lead to massive loss of public health care jobs. In the end, both governments declined to do political battle with the medical profession or with the private hospital associations.

**Implementation Process**

Of the three case study countries, Argentina did the most to manage the process of change, by reeducating key opinion makers and professional staff, facilitating change at pilot hospitals, providing adequate framework legislation, and—most important of all—offering some incentives to get the reform implemented. This may partly explain the progress in Argentina relative to its neighbors.

Organizational reform of public hospitals imposes significant changes in public hospitals’ overall objectives and way of doing business. In those hospitals, more power is in the hands of front-line service providers (doctors) and patients than in the hands of administrators or managers. Therefore, early on in the process of change, we would expect to need strong communication and education programs to create a good environment for success. Once sufficient consensus was obtained, we would also expect some coercive measures to change the status and some persuasive incentives to ensure compliance in the medium term.

Early in Argentina’s reform process, the government promoted supportive education activities such as studies, study hours, workshops, seminars, and training programs. These activities were spread
throughout the country, and included both the health policy network and the provincial hospital and health insurance networks. This was very important for establishing an enabling environment among key opinion makers and preparing professionals for the complex changes envisaged.

The government also contracted intensive organizational development exercises for key pilot hospitals in the city of Buenos Aires and in the provinces of Buenos Aires and Mendoza, as well as lighter organizational development exercises in several other provinces. Under these contracts, pilot hospitals received a team of resident hospital-administration consultants who worked with hospital management to define the hospital’s mission and objectives, create its medium-range development plan, and coordinate the contribution of a series of short-term consultants who came for periods of two to three weeks. The short-term consultants helped the hospital set up key administrative services such as cost accounting, personnel management, pharmacy and supply management, bed management, consultation scheduling, clinical management, and customer services. This was very important for assisting hospital management and key professionals in accepting the public hospitals’ change in objectives and procedures. At the same time, the government established an umbrella legal framework through a national Self-Managed Public Hospital Law that included a provision for the automatic collection of unpaid insurance bills through the internal revenue service. This law was an essential incentive for provinces to introduce the organization changes in their hospitals, since the federal government did not have authority over public hospitals. At the hospital level, most provinces did little reeducation but did pass the relevant provincial decrees and laws—providing some momentum to make things move forward. They also created persuasive incentives for long-term implementation—the capacity to retain revenues generated by billing insurance carriers and charging copayments, and to distribute the revenue as performance bonuses.

Chile also undertook many studies and educational programs. Most activities were at the ministry or managerial level, however, with limited penetration at the service delivery level, where the key
decisionmakers are and where it might have made a greater impact. Also, there was no significant investment in the organizational development of the new regional health service administrations or specific training of the respective managers. Finally, the government was not able to get the key legal acts passed in the legislature.

In Uruguay, implementation was particularly problematic. The government did get the enabling legislation. However, passage was not accompanied by support or development at the level of hospital management. Although the government did promote studies and educational activities, most of them were concentrated within the central government apparatus. Neither was any initial investment made in hospitals’ organizational development that might have facilitated the introduction of reform in the pilot hospitals, as in Argentina. Without enough public debate or consensus building among key stakeholders and without strong support even at the hospital level, the government passed the hospital autonomy decree. Two weeks later, the government had to withdraw it under a barrage of criticism from the provincial health care corporations, which feared that the reform meant privatization in disguise and that public hospitals would compete with their establishments.

Conclusions

Like many countries with integrated public hospital systems, Argentina, Chile, and Uruguay undertook initiatives to reform their hospitals in the 1990s. Also following this worldwide trend, they did so by reducing direct government control and granting public hospitals and ambulatory care networks increased autonomy, while keeping them within the public sector. Thus far, the reforms have not been widely implemented. Most public hospitals are still run as government departments.

Because of the weak implementation of organizational hospital reform in the Southern Cone, it is impossible to draw conclusions on the impact of such reforms. Only a few public hospitals in each coun-
try have acquired critical decision rights related to labor. Market exposure, including financing systems in which the money “follows the patient,” is experimental in Argentina and still a “shadow” budgeting system in Chile, five years after implementation began.

Public hospitals in Argentina and Uruguay can now claim revenues obtained by recovering the costs of insured patient care. In Chile, hospitals formally have this right, but have little incentive to recover costs, because they would have to turn the extra revenue over to the treasury.

Pro forma hospital boards and councils are now widespread. However, they tend to function more in an advisory capacity. In addition, the board makeup and appointment process leaves them highly dependent on politics. Only in Argentina can we find a few examples of hospital managers who have significant autonomy. In all three countries, management contracts are still experimental. Their content and emphasis on performance indicators is varied (table 6.3). In many instances, the contracts appear to be more form than substance. In Argentina, in some instances, the distribution of staff bonuses is tied to continued compliance with performance indicators, but no explicit penalties have ever been imposed for noncompliance.

The social functions of public hospitals, though increasingly recognized, are rarely funded explicitly. However, there is increased interest in implementing funding reforms that would allow such payments. Chile is the only country to propose a different budgeting system to finance “uninsurable goods,” namely, typical public health interventions. Argentina is experimenting with independent financing for training and medical education as “social functions of public hospitals.”

Public hospital autonomy and contracting have been implemented to different degrees and at different paces in the three Southern Cone countries. These differences stem from differences in societal and political contexts, the nature of the changes themselves, the management of the change process, and support and opposition from key stakeholders.
Notes

1. Approximately 60 percent of the population is not insured.

2. Most of the public hospital system in Argentina is owned by provincial and municipal governments.

3. It became mandatory that health insurers pay public hospitals for care provided to their beneficiaries, and an automatic collection mechanism was established for obtaining payments from delinquent insurers.


5. In fact, none of the provinces has established output-based funding or purchasing.

6. See chapter 1 for a detailed definition of what constitutes autonomized and corporatized hospitals in the conceptual framework of this volume.


8. Strictly speaking, neither of these hospitals was reformed under this program; they were both established earlier with a more autonomous governance structure.

9. See chapters 9, 10, and 12 of this volume.


11. Ibid.


15. Ibid.

16. Ibid.
Part 3

Case Studies
Changes in the global economy, stemming from the oil shocks of the 1970s, and the rise to prominence of politicians of the New Right prompted increased questioning of the efficiency and responsiveness of public services. Responding to macroeconomic challenges, governments in the industrial world acted to control public spending. As part of this process, monetarist theories challenged the dominant orthodoxy represented by Keynesianism, most obviously in the United States and the United Kingdom. The public was also increasingly reluctant to pay taxes, and the ensuing “fiscal crisis” marked the start of a fundamental reappraisal of the relationship between the public and private spheres.

Inspired in part by the writings of public choice theorists and other critics of the growth of big government, leaders such as Ronald Reagan and Margaret Thatcher sought to roll back the state and reinvigorate the private sector. In the United Kingdom, this was manifested in policies to privatize nationalized industries and state-owned enterprises. New Right thinking was also reflected in measures designed to strengthen the performance of public services encompassed in the emergence of the “new public management.”1 Through a combination of market-oriented and managerial strategies, politicians sought
to tackle problems in the funding and delivery of public services and in the performance of government itself.

The failure of government agencies to deliver services that were efficient and responsive was acknowledged by politicians of the Center and Left as well as those on the Right. An important strand in the thinking behind the new public management came from management theorists and researchers analyzing trends in organizational structure and culture in both the public and private sectors. Ferlie and colleagues describe how later manifestations of the new public management accommodated this perspective. Of particular note in this context is the work of Osborne and Gaebler and Ranson and Stewart, which articulates an approach of learning from the private sector while recognizing the distinctive features of public services.

Underlying these developments is the argument that the market failures that generated government intervention in the economy and in social policy have given rise to government failures. Although the policy response was perceived to be outright privatization through the sale of state assets in areas where competitive markets existed (e.g., the steel, coal, and airline industries), analysts across the political spectrum acknowledged that this was not the only, or even always the most appropriate, way of addressing government failures. Accordingly, in other cases alternative approaches were pursued, as in the privatization of utilities in the United Kingdom, where suppliers had a monopoly or near monopoly, coupled with new forms of regulation designed to avoid abuse of this position.

Commenting on the U.K. experience with privatization, Foster and Plowden note that two-thirds of formerly state-owned industries have been transferred to the private sector. They add that this approach is based on the principle that “whenever bodies are separated from government[,] either competition or regulation must be established to stimulate greater efficiency.”

Where continuing public ownership was considered necessary, as in the health sector, policies were pursued to make the public sector more businesslike and to adopt successful practices from private sector organizations. An eclectic mixture of policy instruments resulted,
some designed in advance and others that emerged in practice. Walsh, analyzing the approach to the reform of public services in the United Kingdom, notes in particular the use of competitive tendering and the introduction of internal markets.6

**Impact on the U.K. Health Sector**

What was the impact of these developments on the health sector in the United Kingdom? And how was the National Health Service (NHS) affected, given its position as a centrally planned and administered public service, in many ways the archetype of the large, bureaucratic agencies targeted by critics of government failure?

In addressing these questions, we should keep in mind that the NHS became the principal source of health care for the population of the United Kingdom after its establishment in 1948. Funded mainly through taxation and delivered almost entirely through government-owned agencies, the NHS provided both universal and comprehensive services that, with limited exceptions, were free at the point of use. The creation of the NHS contributed to the achievement of population health outcomes comparable with those of other developed countries at a relatively low rate of expenditure (around 6 percent of gross domestic product in the mid-1990s). A small private health care sector continued to play a part alongside the NHS, enabling some patients to avoid long waits for NHS treatment.

Successive governments introduced modifications in the organization of the NHS in the first three decades of its existence. However, not until the election of the Thatcher Government in 1979 were more fundamental options for reform considered. The main emphasis initially was on policies designed to increase efficiency (box 7.1). Among these policies, the most significant was the Griffiths inquiry into NHS management, which reported in 1983.7 The report was highly critical of management arrangements in the NHS and recommended that the system of consensus management through multidisciplinary teams should be replaced by a clearly defined general management function.
The Thatcher Government welcomed the Griffiths report and accepted all of the main recommendations. General managers were appointed, beginning in 1984, although only a small proportion came from outside the NHS. Consistent with the approach proposed by Griffiths, managers were appointed on short-term contracts and could earn performance-related pay after a formal appraisal process. Through the resource-management initiative, steps were taken to involve hospital doctors in management and to devolve budgets to clinical directorates within hospitals. The Health Services Supervisory Board and the NHS Management Board were established, and soon afterward the NHS Management Executive was created as the “head office” for the NHS within the Department of Health.

The Griffiths report served as a stimulus to improve performance and created the conditions in which the changes in the 1989 white paper, Working for Patients, could be introduced. The policies pursued in this period were a dress rehearsal for the radical plans set out in the 1989 white paper.

Box 7.1 Efficiency Initiatives in the 1980s

Five initiatives during the 1980s illustrated the Thatcher Government’s approach to increasing efficiency. First, a requirement was placed on health authorities to generate annual efficiency savings. Second, a series of scrutinies was conducted into areas such as transport services, recruitment advertising, and the use of staff accommodation. Third, a set of performance indicators was developed to enable health authorities to compare their performance with achievements elsewhere. Fourth, competitive tendering was introduced for catering, cleaning, and laundry services. And fifth, an income-generation drive was launched. This included generating income from private patients treated in NHS hospitals and allowing health authorities to set their own charges under the 1988 Health and Medicines Act.
in the white paper, plans whose implementation was to have rever-
berations not only in the United Kingdom but also farther afield.

**NHS Trusts Reform Design**

*Working for Patients* was the outcome of a ministerial review set up by
Margaret Thatcher in 1988. The white paper, published a year after
the review began, was an attempt to address problems that had arisen
in the NHS at the end of the 1980s. Foremost among these was a
perception that the NHS was underfunded, despite the impact of the
Thatcher Government’s various efficiency initiatives. The challenge
for the government was to apply its radical reforming instincts in an
area of social policy where the influence of staff groups was strong
and where the public placed a high value on the service provided.

After considering and rejecting options for changing the way the
NHS was funded, the review focused mainly on the delivery of
health services. Drawing on ideas outlined by the American econo-
mist, Alain Enthoven, ministers proposed to introduce competition
between hospitals and other providers. Competition was to be
achieved by autonomizing hospitals and introducing marketlike in-
centives through changes to the funding arrangements within the
NHS. The core proposals in the government’s plans were to:

- Convert hospitals to self-governing NHS trusts, to manage ser-
  vice provision
- Transform health authorities into buyers of services
- Also have “fundholding” groups of general practitioners who pur-
  chase hospital services for their patients
- Use contracts to provide the link between purchasers and
  providers.

“Money should follow patients” was a key idea contained within
the reforms. It was intended to overcome the perverse incentive of
the previous budgeting arrangements in which hospitals were in ef-
fect penalized if they increased productivity because their income was fixed at the beginning of each year, but their expenditure rose in line with activity. The reforms were also intended to increase efficiency and responsiveness by forcing providers to compete for income from purchasers.

The establishment of self-governing NHS trusts was the main institutional change on the provider side of the NHS. On the purchaser side, the new arrangements centered on health authorities and general practitioner (GP) fundholders. Initially, health authorities in England were responsible for buying health services for populations of around 300,000 on average, although subsequent mergers between authorities increased the size of the population served. GP fundholders were allocated a budget to purchase a limited range of services for their patients, and 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.

A start was made in implementing these changes in 1991, and the number of NHS trusts and fundholders increased each year. By 1996, the organizational transformation of the NHS, initiated by Working for Patients, was effectively completed in England with the establishment of almost 450 trusts and 100 health authorities. By that date, fundholding covered about half the population. Alternative models of fundholding evolved in parallel, including networks of practices known as “multifunds” and a number of pilot “total purchasing projects” (TPPs), in which general practitioners purchased all services. In addition, commissioning groups of general practitioners, often involving fundholders and nonfundholders, were established in many places to advise health authorities on purchasing services. Thus, purchasing arrangements grew in variety and complexity. The resulting structure of the NHS is illustrated in figure 7.1.

Among the many innovations to result from the reforms, the establishment of NHS trusts to manage hospitals and other health care providers was particularly important. A wide variety of services came
together to form trusts. Some were responsible only for large acute hospitals, in line with the expectations set out in *Working for Patients* and other early guidance. Others managed community and mental health services as the guidance was gradually relaxed to allow other providers to seek trust status. Yet others formed “whole district” trusts, bringing together the full range of acute and community services within a single organization. Responsibility for running ambulance services was also vested in trusts.
The decision to set up NHS trusts was based on two considerations. First, the architects of NHS reforms perceived that devolving responsibility for management to hospitals and other health care providers would be beneficial. Under the pre-1991 arrangements, health authorities carried this responsibility, and it was argued that this served to delay decisionmaking and to militate against local ownership of and identification with service provision by requiring decisions to be referred “up the line.” In this respect, the establishment of NHS trusts harked back to an earlier period in the history of the NHS (1948–74), when teaching hospitals had their own boards of governors. Those involved in writing the white paper drew on this model in framing their proposals.

Second, and more radically, removing hospitals and other providers from the management control of health authorities was seen as essential to enable health authorities to assume their new purchasing role within the NHS market. At one level, this was because health authorities would no longer carry ultimate responsibility for the direct management of services and could therefore concentrate on assessing the population’s health needs and commissioning services appropriate to these needs. At another, it was a precondition for health authorities to be able to place contracts with providers of their choice rather than simply those under their own management. To this extent, creating a genuine separation of purchaser and provider roles was an important step on the road to selective contracting within the NHS.

In explaining the plans set out in the white paper, government spokespersons emphasized that trusts remained part of the NHS. They were established as separate legal entities (though still public bodies) under the NHS and Community Care Act of 1990, and their powers and duties were contained within that statute (for ease of reference, the relevant parts of the act are reproduced in Appendix 7A). Each trust was placed under an obligation to balance its budget, taking one financial year with another. The general powers of trusts included:

(a) to acquire and dispose of land or other property;
(b) to enter into such contracts as seem to the trust to be appropriate;
(c) to accept gifts of money, land or other property, including money, land or other property to be held on trust, either for the general or any specific purposes of the NHS Trust or for all or any purposes relating to the health service; and
(d) to employ staff on such terms as the trust thinks fit.10

The position of trusts as public bodies within the NHS is reinforced by the provisions of the 1990 Act, which gives the secretary of state powers to supervise trusts and to require them to comply with guidance or directions. They also remain subject to legislation affecting NHS facilities, including the Hospital Complaints Procedure Act of 1985, the Data Protection Act of 1984, and the Access to Health Records Act of 1990, as well as European Union law. Taken together, this meant that trusts operated within a highly regulated environment.

The rationale behind trusts was set out in Working for Patients and also in the working paper, published shortly afterward, which stated:

The Government is committed to devolving decision-making in the National Health Service to local operational level in order to make hospitals more responsive to the needs of their patients, to secure local commitment and to achieve greater value for money. The next logical step in the process of extending local responsibility is to enable NHS hospitals to achieve self-governing status. Self-governing hospitals will remain firmly within the NHS and there will be safeguards to ensure that essential local services continue to be provided locally. But they will have far more freedom to take their own decisions on the matters which affect them most without detailed supervision from above. This new development will give patients more choice, produce a better quality service and encourage other hospitals to do even better in order to compete.11

As this working paper and subsequent guidance made clear, the reform model designed for the trusts was best understood in comparison with that of hospitals and units directly managed by health authorities, particularly in their greater level of operational inde-
The Political Context of Implementation

Before discussing the impact of the reforms and the evolution of NHS trusts, a little more detail may be helpful on the context in which these changes were implemented. *Working for Patients* received a hostile reception from the main professional groups in the NHS who expressed concern at the commercialization of health care implied by the government’s plans and who also feared a hidden agenda that would lead to the privatization of service provision. Ministers consistently denied that this was their intention, arguing that their aim was to strengthen and modernize the NHS, not undermine it. They stressed their commitment to maintaining a health service where treatment was based on need, not ability to pay. Despite their reassurances, many NHS employees distrusted the government’s motives, which meant that the changes were taken forward with little enthusiasm in many quarters.

In implementing *Working for Patients*, ministers started from a broad framework, and much of the policy and organizational detail of their plans was missing at the outset. This reflected the speed with which the white paper was produced and the concern about meeting the prime minister’s one-year deadline for publication. Further guidance was forthcoming in a series of working papers, published soon after the white paper was issued, but to a considerable degree, making the government’s plans work on the ground was left to NHS staff. This approach has variously been described as ministers “making it up as they went along” and as an “emergent strategy,” but the effect was the same. Key elements of policy were worked out only in the course of implementation, and by no means was implementation informed by a coherent view of how the reforms were intended to work in practice or where they would eventually lead. Moreover, the language shifted away from explicit discussion of markets to a concern that purchasers and providers should seek to build long-term partnership relationships.
### Table 7.1 Comparison of the Regimes of NHS Trusts and Directly Managed Units

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>NHS TRUST</th>
<th>DIRECTLY MANAGED UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>Each trust is run by its own board of directors. The trust is free to determine its own management structure. Senior professional staff members must be involved in management.</td>
<td>DHA is responsible for unit. UGM is responsible for day-to-day management. Internal management arrangements are subject to DHA approval.</td>
</tr>
<tr>
<td>Accountability</td>
<td>Each trust board is directly accountable to secretary of state via NHSME.</td>
<td>Each unit is accountable to its managing DHA. DHA is accountable to RHA, and RHA is accountable to secretary of state via NHSME.</td>
</tr>
<tr>
<td>Funding</td>
<td>Each trust’s income derives largely from contacts with health authorities, GP fundholders, and private sector.</td>
<td>Each unit’s income derives largely from contracts with health authorities, GP fundholders, and private sector.</td>
</tr>
<tr>
<td>Services</td>
<td>Each trust is free to determine range and extent of its services, except that where a service must be provided locally, a trust can be obliged to provide it if it is the only unit able to do so.</td>
<td>Range and extent of services offered by a unit are determined by managing DHA.</td>
</tr>
<tr>
<td></td>
<td>Each trust provides services it is contracted to provide.</td>
<td>Each unit provides services it is contracted to provide.</td>
</tr>
<tr>
<td></td>
<td>Trust is not required to consult Community Health Council on closures or changes of use.</td>
<td>Closures and changes of use are subject to formal consultation with Community Health Council.</td>
</tr>
<tr>
<td>Employment of staff</td>
<td>Each trust sets its own staffing structure and levels. It employs all its own staff, including consultants.</td>
<td>Each unit determines its own staffing structure, but DHA or RHA employ its staff.</td>
</tr>
<tr>
<td></td>
<td>Each trust is free to determine pay and other terms and conditions of employment of all staff. Staff members transferring to trust retain their existing terms and conditions of service until changes are negotiated.</td>
<td>Pay and other terms and conditions of employment of nearly all staff members are subject to review body or National Whitley Council agreements or departmental determination.</td>
</tr>
</tbody>
</table>

(Table continues on the following page)
Table 7.1 (continued)

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>NHS TRUST</th>
<th>DIRECTLY MANAGED UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial duties</td>
<td>Each Trust was placed under an obligation to balance its budget, taking one financial year with another. It is also required to achieve a 6 percent return on assets and keep within agreed EFL.</td>
<td>Managing DHA has statutory duty to balance its budget each year. UGM has managerial imperative to ensure unit breaks even. The unit has to pay capital charges equivalent to depreciation and 6 percent interest on fixed assets.</td>
</tr>
<tr>
<td>Prices</td>
<td>Each Trust prices to cover running costs, depreciation, and return on assets.</td>
<td>Each unit prices to cover running costs and capital charges (depreciation and interest).</td>
</tr>
<tr>
<td>Surpluses</td>
<td>Trusts may retain surpluses.</td>
<td>Units cannot retain surpluses.</td>
</tr>
<tr>
<td>Borrowing</td>
<td>Each Trust is free to borrow within agreed EFL.</td>
<td>Units have no power to borrow.</td>
</tr>
<tr>
<td>Insurance</td>
<td>Trusts do not insure for clinical negligence. They may insure for other insurable risks.</td>
<td>Units do not insure for clinical negligence or other insurable risks, with certain limited exceptions.</td>
</tr>
<tr>
<td>Ownership of assets</td>
<td>Each Trust owns assets. It is generally free to acquire and dispose of assets and retain proceeds from any sales.</td>
<td>Each unit’s assets are owned by the secretary of state or health authority. Acquisition and disposal of assets are subject to control and regulation by Department of Health, RHA, and managing DHA. Retention of sales proceeds is subject to decisions by RHA.</td>
</tr>
<tr>
<td>Capital</td>
<td>Each Trust makes case for capital development to NHSME and funds agreed program from own resources or by borrowing within agreed EFL.</td>
<td>Each unit makes case for capital developments to DHA or RHA. Funding depends on allocations from regional capital program.</td>
</tr>
</tbody>
</table>

Note: DHA district health authority; EFL external financing limit; NHSME NHS Management Executive; RHA regional health authority; UGM unit general manager.

Table 7.1 indicates that the key decision rights transferred to NHS trusts fell into three main areas: financial, managerial, and personnel. The government emphasized that its plans would enable trusts to borrow money more easily, make decisions without recourse to higher tiers of management, and employ staff on terms and conditions determined locally, not centrally. These freedoms were designed to bring benefits for staff and patients and to foster local ownership and pride in the provision of health services. Put another way, the aim was to create a stronger set of incentives to improve performance than had existed hitherto. And, although the decision to seek NHS trust status was a matter for the staff involved to resolve, the government made clear its expectations that this would become the preferred model.

At an early stage in the implementation of the reforms, it became clear that some of the freedom available to NHS trusts was more hypothetical than real. This applied most obviously to the financial regime under which trusts operated. The details of this regime were complex and were only fully understood by those closely involved in their operation. For the purpose of this chapter, the essential points are summarized in box 7.2. The main financial duties of trusts when they were established were threefold:

- To balance its budget, taking one financial year with another
- To earn a 6 percent return on their assets
- To keep within the external financing limit (EFL) set each year.

The last of these duties was particularly important. The concept of external financing limits had been applied by the government in other areas (such as the public utilities) and it was therefore a well-established element of public sector reform. Each trust agreed on an EFL with the regional office of the NHS Management Executive annually, and this acted as a form of expenditure control. Regional offices worked within expenditure totals agreed between the Treasury and the Department of Health and subsequently distributed between the eight English health regions.
Under these arrangements, a trust could be given an EFL that was positive, negative, or zero. These were defined as follows:

A positive EFL is set where the NHSME has agreed capital spending for a Trust which exceeds internally generated re-

Box 7.2 The Financial Regime of NHS Trusts

Trusts were established with the Treasury as the “share-
holder.” Each trust owned its assets and the value of these
assets was matched by an originating capital debt owed by
the trust to the Treasury. The originating capital debt was
made up of interest-bearing debt and public dividend capi-
tal. The payments made by trusts on their debt were recy-
cled to health authorities to ensure that purchasers had ade-
quate resources to pay the prices charged by trusts,
including the 6 percent return on assets required under the
financial regime. The establishment of trusts in this way
opened up the opportunity of more radical change, includ-
ing the privatization of services, at a later date.

One of the aims of these arrangements was to move away
from the previous system in which NHS capital was a “free
good” by introducing greater awareness of the costs of cap-
ital expenditure. It was also intended to provide an incentive
to trusts to sell land and property that was surplus to re-
quirements as this would reduce their interest payments as
well as generating resources for development. Although in
some cases entrepreneurial managers seized the flexibilities
available to them in precisely the manner that had been an-
ticipated by the architects of the reforms, more often there
was reluctance to dispose of assets because of anticipated
opposition from staff and the public. Together with the bu-
reaucracy associated with these arrangements, this under-
mined the system of charging for capital.
sources, resulting in the Trust needing to borrow or reduce investments in order to finance its spending programme.

An EFL of zero is set where the agreed spending programme equals internally generated resources.

A negative EFL is set where the agreed spending programme is less than internally generated resources. In these circumstances a Trust is not able to use all its retained surplus or depreciation on capital expenditure. Some or all of these resources must be used to repay loans or be invested. The investments made are normally held by the Trust and may be available to finance future planned spending.\textsuperscript{13}

What this meant was that trusts with a negative EFL were only allowed to use internally generated resources up to the limit agreed on with the regional office. Although these resources were retained by the trust, the incentive to sell surplus assets to fund new developments was weakened.

Trusts were further constrained by guidance that required them to borrow on the best terms available. Effectively, this ruled out raising capital on the private markets as the rates available from the Treasury were lower than those available from private sources. Only with the introduction of the private finance initiative (see below) did the aversion to the use of private capital change. And with the availability of funds from the Treasury for capital developments subject to the outcome of the annual public expenditure negotiations and the macroeconomic objectives of the government, bureaucratic bargaining and bidding on the basis of business cases exercised a strong influence on the allocation of capital resources. This was reinforced by the Department of Health and Treasury retaining control over capital projects of any scale through the need to secure their approval of these projects before they could proceed.

Yet another constraint within the financial regime was the requirement that the prices charged by trusts be based on their costs in order to enable them to earn a 6 percent return on their assets. The only exception was in relation to contracts with the private sector where trusts were advised to price their services at the level the market would bear. Department of Health guidance also stated that
trusts should not plan to cross-subsidize their services, nor use marginal costing unless spare capacity arose during the year. In this respect, they were expected to follow the same pricing regime as directly managed units; trust status therefore offered few advantages in comparison with these units. Although empirical evidence indicated that trusts did not always follow this guidance, central regulation of pricing was symptomatic of the way in which the market was regulated.

There was much greater potential freedom in relation to personnel where trusts were no longer constrained by national pay rates and terms of service but were able to negotiate locally with their staff. This was linked to the movement of consultant contracts (i.e., medical specialists) to trusts. A number of trusts used this freedom to introduce innovative forms of employment but in general they were slow to depart from existing arrangements. One of the reasons was that NHS staff retained their employment rights and contracts when they transferred to trusts. Changes could be made as a result of negotiation between trusts and staff but could not be imposed. Most trusts chose to make changes at the margins, for example, in the appointment of new staff, and avoided rapid or radical departures from past practice for existing staff. This was due less to the resistance of staff and the veto power of trade unions (which had been seriously weakened by the Thatcher Government’s reform of labor laws) than to the size of the NHS work force and the scale of the work involved in renegotiating employment contracts across the board. It also reflected the culture of the “NHS family” and the reluctance of management to challenge established practices.

What this meant was that the management freedom trusts had was more significant than changes in the financial regime or personnel policy. Under the NHS and Community Care Act of 1990, each trust was run by a board of directors. This comprised a chairman appointed by the secretary of state for health, up to five other nonexecutive directors (two appointed by the regional health authority and the remainder by the secretary of state), and an equal number of executive directors, including usually a chief executive, a finance director, a medical director, and a nursing director. The trust board was
responsible for determining the overall policies of the trust, monitoring the execution of these policies, and maintaining the trust’s financial viability. Freed from the direct management control of health authorities, trusts ran their own affairs within the framework of the contracts they negotiated with purchasers and the accountability arrangements described earlier. As research has shown, those involved in trusts used their management freedom to make a number of changes in their organizations.\textsuperscript{15}

The remuneration of chairmen and nonexecutive directors was determined nationally. Each trust was responsible for deciding the terms of the contract offered to chief executives, and salaries varied depending on the size and complexity of the organization. Continuing the trend initiated by the Griffiths general management reforms, chief executives were usually appointed on short-term (but renewable) contracts and were eligible for performance-related pay. Senior managers were expected to deliver on the objectives set for them or face termination of their contracts.

\textbf{Market Exposure}

As time went on, the internal market in the NHS became in reality a managed market in which politicians were reluctant to allow competitive forces free rein. In the first year of implementation, this reluctance was reflected in guidance that emphasized the need to achieve a “smooth takeoff” by ensuring a “steady state” in the service market—hence at least delaying the development of any market exposure or competitive forces. The fact that 1991–92 was an election year heightened the sensitivities of politicians and helped to explain their reluctance to allow the market to operate in an unregulated fashion. Purchasers were permitted greater freedom to make changes in subsequent years but still had to give advance notice of plans to move services and contracts to avoid harmful disruption. This meant that although trusts were required to earn their income, their market exposure was limited.

Outside London, the regulatory framework for the market developed piecemeal. Only in 1994 was national guidance issued.\textsuperscript{16} By
that stage, many of the behavior patterns that were to shape the relationship between purchasers and providers had become well established. Indeed, one purpose of the guidance was to draw together some of the lessons learned in the first phase of the reforms and to provide a framework for their further development. In so doing, the guidance started from the position that government regulation should promote competition. It then noted that the presumption should be against intervention in the market unless necessary to counter anticompetitive behavior such as collusion between trusts.

Four areas were examined in detail in the guidance: provider mergers, purchaser mergers, managing change where providers are in difficulty, and collusion. Rules were set out for handling these situations. The guidance cautioned against provider mergers that would result in the emergence of local monopolies and stressed that purchaser mergers should proceed only where the views of patients and general practitioners could be heard effectively. On the issue of providers in difficulty, the guidance stressed that change should be planned and carried out with minimal disruption. In this case, health authorities and trusts were reminded of the need for public consultation and support of regional offices. In this area at least, the guidance underlined the extent to which the market remained regulated.

The excess capacity in London made it the most likely place for competition to emerge and generate performance pressures. Perversely, this is where central control was most evident, following a government-sponsored review under Professor Sir Bernard Tomlinson to advise on how the effects of the market in London could be handled to properly plan change. Subsequently, purchasers were required to place contracts in a way that was consistent with government policy. An example that arose in 1993 concerned the Camden and Islington Health Authority, instructed not to move its contracts to trusts offering lower prices. This health authority had to leave the contracts with University College Hospital so that the rationalization of services taking place in that part of London could proceed according to plan.

In contrast to the market for hospital services, market exposure did emerge in the market for managerial labor. Chief executives hired
after the reforms could have their contracts terminated—an outcome that occurred with reasonable frequency. In some cases, chief executives (and occasionally chairmen) were forced to resign after losing the confidence of medical staff. Though a relatively rare occurrence, the possibility of forced resignations served to encourage the rest and brought market pressures to bear in the managerial labor market.

**The Performance of Trusts**

Recognizing these tensions, what does research into the reforms tell us about the performance of trusts? Hamblin has summarized the results of the studies that have been conducted. As he and other researchers emphasized, drawing conclusions from the work that has been done is difficult because study designs were not always rigorous, the decision to seek trust status was voluntary, and differences in performance may therefore be attributable to the decision of certain types of providers to go down this route in the early stages of implementation. Nor is it easy to disentangle the effects of trust status from other changes occurring at the same time.

Accepting these cautions, Bartlett and Le Grand drew on an analysis by the Newchurch consultants to show that most first wave trusts either met or improved on their initial financial performance targets. This level of performance was not sustained. For example, the annual audit of NHS accounts, published by the Comptroller and Auditor General, drew attention to the financial difficulties trusts experienced in 1995–96 and expressed concern at the number of trusts that had failed in their financial duties. A similar picture emerged in 1996–97 when 148 out of 429 trusts failed in one or more of their financial duties after adjusting for technical factors. Figure 7.2 identifies the source of these failures.

Bartlett and Le Grand's own research into the costs of hospitals involved in applications for trust status and other hospitals found lower unit costs in trusts than nontrusts, especially in the first wave. This led them to conclude:

> [T]he first wave trust applicants were a self-selecting group of hospitals which had lower average unit costs, especially in the
nonclinical departments. . . . Any research showing improved performance of the first wave trust applicants relative to DMUs [directly managed units] . . . must therefore be treated cautiously, as these are likely to have been those hospitals which were already performing better than others under the old system.20

They also noted that higher cost providers were likely to be attracted to trust status over time, which would make sustaining improved performance in trusts difficult. They attributed this poor prognosis to the fact that differences in performance between second wave trusts and nontrusts were related to factors such as size and case mix instead of intrinsically better managerial performance.

More recent research by Soderlund and colleagues has challenged the view that first wave trusts had lower costs prior to the reforms.21 After adjusting for case mix, they found that the early trusts started out less productive than directly managed units. Costs decreased significantly with the change from directly managed to trust status. Over the
first three years of the reforms, real productivity gains were achieved and, in the case of second and third wave trusts, the largest gains were in the first year of gaining trust status. By the end of the period studied, there were no significant differences in productivity between trust waves or between trusts and directly managed hospitals.

Soderlund and colleagues found that competition between hospitals had no significant effect on productivity. This conclusion conflicted with other research that found:

- Costs were higher in more competitive markets at the start of the market, but decreased rapidly after the start of the reforms in competitive areas. Hospitals with few competitors, on the other hand, had lower costs on average in 1991/92, but made little by way of cost savings during the study period.22

Of particular interest is Csaba and colleagues’ finding that trusts were more responsive than directly managed units to competition.23 In a separate study, Propper found some evidence that the degree of competitiveness was related to the prices charged by trusts, lending support to the argument that the market, where it existed, was having the effect anticipated.24

Other evidence on the comparative performance of trusts comes from Smee’s analysis of NHS activity data.25 In relation to the number of patients treated, Smee showed that trusts outperformed directly managed hospitals in the first two years. First wave trusts performed particularly well in undertaking a high proportion of day-case surgery but this did not apply to the second wave. First wave trusts also performed better than directly managed hospitals in achieving the government’s waiting time targets, although early data from second wave trusts showed that they performed less well on this indicator than directly managed hospitals. A similar picture emerged from comparisons of the total number of patients waiting for treatment.

In relation to other areas of performance—for example, the quality of care provided by trusts—the available research evidence is scanty. As Hamblin emphasized in his review, analysts therefore have to rely on anecdote and indirect research.26 This shows that it is hard
to prove that trust status was directly responsible for improvements in the quality of services. There is no evidence that trusts increased patient choice or that trusts became more accountable to their local populations. Indeed, examples of quality failures in this period (e.g., in relation to cancer-screening programs) could be seen as evidence that trust status and competition had adverse effects on patient care in some areas. Against this, the management freedoms available to trusts released a good deal of energy in many places, helping to bring about improvements in the environment of care and in organization of services.

**The Dynamics of Trusts**

In explaining the performance of trusts, two factors should be emphasized relating to the reasons for establishing trusts. First, the tendency of ministers and civil servants to intervene in a range of areas eroded the operational freedom envisaged for trusts at the outset. Smee has observed:

> [M]inisters and the center are finding it difficult to reconcile devolved accountability with the demand for detailed monitoring created by parliamentary and media interest in operational issues. In consequence, the center is drawn into a whole range of issues, from hospital catering standards to the freedom of speech of hospital staff that it once expected to leave to the discretion of local management. The dilemma is that without substantial operating freedom, Trust management cannot be expected to produce a better performance than the old directly managed units, but that with such freedom there is bound to be a diversity of behaviors and performance. The existence of outliers is then seen—by the press, auditors and politicians—as a cause for central regulation.²⁷

Put more colloquially, ministers risked being damned if they did intervene and damned if they didn’t. The result was an uncomfortable compromise between genuine devolution and centralized direction—a practical illustration of the tensions involved in the oxymoron otherwise known as the “managed market.”
Second, the extent to which the conditions for competition existed varied across the NHS. While there was evidence that many acute care hospitals were in a competitive environment, some trusts enjoyed a near or total monopoly.\textsuperscript{28} Moreover, even where a market existed, purchasers were often reluctant to use their leverage to improve performance. This was illustrated by health authorities’ extensive use of block contracts, which offered little advantage over the global hospital budgets they replaced and meant that, in practice, selective contracting rarely took place. GP fundholders were more inclined to use cost-and-volume and cost-per-case contracts and to “shop around” and get the best deal for their patients, but they, too, were often loyal to their local NHS trusts; in many cases, they were not inclined to move to alternative providers. Adding the requirement that trusts fulfill their social functions by treating emergencies, whatever their source, further attenuated market incentives.

The lack of a tradition of purchasing in the NHS and the complexities involved in being an active, intelligent commissioner rather than a passive payer, meant that the countervailing force needed to stimulate changes in provider behavior was not always present at the outset. This deficit was compounded by the emergence of a “commercial-in-confidence” culture in which trusts were reluctant to disclose information about their costs and quality unless required to do so under the terms of their contracts with purchasers. Because the Department of Health did not support purchasers by requiring information disclosure, the resulting asymmetries meant that purchasers were often negotiating from a position of weakness, not strength. To the extent that providers’ performance only partially lived up to the reform architects’ expectations, one important contributing factor was that the envisioned accountability regime never became fully functional, especially with regard to NHS purchasing and weaknesses in the regulatory framework.

Rarely was a trust dissolved. The most notable exception, the winding up of the Anglian Harbours Trust in 1997, was widely (though erroneously) reported as the first trust to go “bankrupt” (erroneous because trusts as public bodies cannot go bankrupt). The
event received so much attention precisely because it was an unusual case (box 7.3).

In other circumstances, market tensions and market pressures were handled through established administrative mechanisms instead of allowing trusts to go out of business. Regional offices played their part in these mechanisms, for example, by brokering cash surpluses and deficits between different areas in circumstances where funds were sufficient to overcome short-term problems and by working with trusts to tackle financial difficulties. Financial difficulties were identified as part of the quarterly reporting arrangement be-

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**Box 7.3 The Dissolution of Trusts**

The Anglian Harbours Trust, established in 1991, provided a range of community health services, including mental health and learning disability services and community hospitals. It was a small trust with an income of £28 million (US$45 million) and a staff of just under 1,000. In its early years, it was relatively successful. Later, it had difficulties with its mental health services, and the two health authorities buying these services decided to take their contract to an adjacent specialist mental health provider. This raised a question about the viability of the remaining services run by the trust. Again, the health authorities decided to remove these services from Anglian Harbours and to invite bids from other trusts. The Anglian Harbours’ staff was transferred to the new providers, with the exception of 63 members who were made redundant. The trust ceased to exist on September 30, 1997.

between trusts and regional offices, and underlying recurrent problems were dealt with by a recovery plan agreed between the trust and the regional office. Progress against the recovery plan was monitored through monthly reporting, regular meetings with trust senior managers, and the trust’s achieving specific milestones. Regional offices were also involved in arbitrating contract disputes. Because contracts were not legal documents, disagreements between purchasers and providers were resolved informally instead of through the courts.29

Trust boards themselves attached great importance to maintaining their organizations’ viability and expanding and developing their services. Yet given the slow development of the NHS purchasing function and the constraints on public expenditure for health services, many trusts looked to the private sector to enhance their income. Trusts were in fact required to seek income, not just to manage expenditure (the main requirement on hospital managers before the introduction of the reforms). As a result, trusts running acute care hospital services worked to supplement the income they received from NHS purchasers by attracting additional resources from private patients, using the freedoms created by the 1988 Health and Medicines Act (box 7.1). This often involved creating or upgrading dedicated NHS pay-bed units within trusts and putting them into competition with private hospitals. Ironically, NHS trusts became major providers of services to private patients, thereby posing a threat to private hospitals, which had expected to become beneficiaries of NHS reforms by attracting patients and income from NHS purchasers.

The blurring of the distinction between the public and private sectors was accentuated by the application of the private finance initiative (PFI) within the NHS. PFI was launched in 1992 as a way of attracting private finance to pay for public sector capital projects across government as a whole. Initially, PFI was of marginal importance in the NHS, confined mainly to small projects such as car parks and incinerators. However, under a change of rules published in 1995, NHS trusts wishing to undertake major capital programs were required to seek private financing. The rules enabled private involvement to extend not only to new building costs but also to the
provision of associated services such as catering, cleaning, and some clinical services. PFI entailed the coming together of consortia comprising financial institutions, construction companies, and facilities managers to bid for NHS projects. Whereas originally PFI was considered a supplement to treasury funding, over time it became a substitute as the NHS capital program was cut back. After the 1997 general election, the Labour Government made clear its continuing support for PFI and moved quickly to ensure that projects at an advanced stage of planning were taken forward.

**Emerging Lessons**

Researchers and independent analysts have offered a variety of judgments on the overall impact of the marketizing organizational reforms that took place in the United Kingdom. The most comprehensive early assessment detected relatively few changes in the first stages of implementation and argued that more time was needed to reach an informed judgment. A more positive assessment was made by the Organisation for Economic Co-operation and Development (OECD), which found much to commend in the changes that had been introduced, pointing to encouraging early results from the performance of NHS trusts as an example. However, Bloor and Maynard challenged these conclusions, pointing to the inadequacies of the evidence on which they were based. In a separate review, Maynard and Bloor argued that the success of the reforms had been mixed, a view echoed by Klein in his assessment. A systematic review of the research evidence on different aspects of the reforms concluded that, overall, little change (either positive or negative) can be detected. A common point in many of these analyses is the difficulty of separating the effects of the reforms from the effects of increases in NHS funding and other changes in government policy toward the NHS occurring at the same time.

My own reading of the evidence and reflections on the experience of working with a wide range of NHS agencies throughout this period indicates that, while measurable change may have been limited,
the balance of power within the NHS has shifted over time. Most notably, the influence of trusts has been increasingly challenged, which has led to increased attention to public health and primary care. It has also been associated with emerging interest in evidence-based medicine and health-technology assessment. This has resulted in a questioning of traditional patterns of resource allocation and priority setting and of the old system of “planning by decibels,” in which acute care providers won the biggest share of resources. These findings are supported by the research of Ferlie and colleagues, which also noted changes in the balance of power within the NHS and changes in culture, particularly in relation to the increasing influence of GPs vis-à-vis hospital doctors, the rise of managerialism, and the beginnings of a shift from management by hierarchy to management by contract.

Of particular importance in this process was the increasing influence of both health authorities and fundholders as purchasers. As noted, the slow and uneven development of purchasing helps to account for the evidence of relatively limited change in trust performance in the early stages of the reforms. Although progress continued to be variable, an increasing number of reports pointed to examples of innovations in purchasing, including the use of more sophisticated contracts and relational contracts. This suggested that the countervailing force that was needed to challenge the power of trusts was at last beginning to achieve results. A more general point follows, namely, that bringing about change in health care takes time, and attempts to evaluate reform programs have to be sensitive to this.

Alongside these largely positive effects, the reforms have also had some undesirable consequences. Most notably, a range of anecdotal and other evidence has it that equity has been undermined by the ability of GP fundholders to obtain quicker access to hospitals for their patients, regardless of clinical need. Concerns were also widespread that the reforms had increased transaction costs as the number of managers employed increased to deal with the complex process of contract negotiation and monitoring. In response, plans to streamline the structure of the NHS and to simplify contracting arrangements were implemented. Targets were also set for reducing...
management costs in both trusts and health authorities. An efficiency scrutiny that reported in 1996 set out a range of proposals for cutting back on paperwork and regulation, emphasizing the need to move toward long-term contracts in the internal market.\textsuperscript{39}

Going beyond these assessments, I have suggested that the management of the NHS should be guided by the following principles:

- A commitment to a genuine and statutory separation of purchaser and provider roles
- Development of devolved management of providers to ensure that decisions are made as close to the patient as possible
- Support for the continuation of an independent commissioning or purchasing authority able to base planning on health needs
- Recognition that the purchaser/provider system should be used to ensure accountability for the use of resources
- Acknowledgment that the purchaser/provider system should encourage collaborative arrangements in which purchasers and providers work together on a long-term basis
- A commitment to contestability rather than competition as a way of stimulating improvements in performance and providing incentives for efficiency
- Support for different models of GP involvement in commissioning, including accountable fundholding
- A commitment to reduce transaction costs by moving away from the annual contracting cycle to long-term contracting relationships.\textsuperscript{40}

In this context, the term \textit{contestability} is used to indicate the lowering of barriers to entry for other providers, which opened up the possibility of switching providers if necessary. The starting point of such an approach is that efficiency and quality gains are best achieved by purchasers and providers working together to deal with issues of
common concern. Only if this fails will purchasers consider moving contracts to alternative providers. However, this threat is ever present, and the knowledge that purchasers may move contracts and resources acts as a stimulus to providers to improve performance. The emphasis on contestability recognizes the need for a planned approach to be combined with marketlike incentives to stimulate providers to use resources for the benefit of service users. These incentives include the use of comparative information on performance as well as the possibility to switch resources to alternative suppliers. It was felt that this would lead to “competition for the market” rather than “in the market,” thereby avoiding expensive duplication in services, as was known to be effective in other sectors with a natural monopoly.

An Assessment

Drawing these strands together suggests that in the United Kingdom, the failure of the organizational reforms to live up to the expectations of its architects can be attributed to three factors:

• Many trusts were reluctant to use their resources fully, and Treasury and the Department of Health continued to exercise hierarchical oversight, undermining the independence and responsibility of the trusts.

• The external environment (both funding arrangements and market environment) did not generate sufficient competitive pressures.

• The institutional context of reform and political pressures militated against the use of the market in practice.

Treasury and the Department of Health continued to exercise oversight, especially in relation to the financial decisions. Only in the area of management freedom did trusts have the powers anticipated
at the outset, but the extent to which they used these powers to bring about improvements in efficiency and responsiveness depended on the attitude and abilities of trust boards and their senior managers. This meant that the nature and pace of change varied widely and relied more on management capacity than market stimulus. With both decision rights and accountability arrangements constrained by hierarchical controls, the potential benefits of trust status remained largely unfulfilled.

The environment in which trusts operated did not always give rise to the conditions in which competition could emerge. Despite scope for competition in parts of the NHS, neither fundholders nor (especially) health authorities showed great enthusiasm for using their leverage to improve performance by moving contracts and resources between providers. This inertia was reinforced by the constraints politicians placed on purchasers in the initial stages and the time taken to develop an effective purchasing function. Purchasers themselves were not accountable for their performance, so they in turn had weak incentives to press trusts for improvements. And, trusts’ “commercial in confidence” attitude to the use of information did not help. This situation might have been addressed by developing an explicit regulatory framework for the internal market, but the framework was introduced belatedly and did not deal directly with information disclosure. The reluctance to allow trusts to fail and to manage change through traditional administrative mechanisms perpetuated established working arrangements and demonstrated the difficulty of altering a firmly entrenched culture. Market exposure was therefore limited, and command-and-control mechanisms continued to prevail.

The institutional context in which the reforms were introduced, and the political influence that was brought to bear, also militated against the use of the market in practice. This is arguably of the greatest importance in explaining the failure of the internal market to live up to expectations. With the benefit of hindsight, it is not difficult to explain why. To overturn a 40-year history of planning and regulation is no easy task. Competition might have had an impact if politicians had had the courage of their own (and their predecessors’)
convictions and used regulation to encourage the market to develop. This did not happen.

An assessment of the U.K. reforms using the framework described in chapter 1 is summarized in box 7.4.

**Box 7.4 Decision Rights**

The main freedoms gained were in the area of day-to-day decisionmaking. Trusts no longer had to seek permission from higher authorities and enjoyed more management autonomy than directly managed units. The financial freedom trusts had was constrained by Treasury rules on borrowing and the use of internally generated funds, and by rules that prices should be based on costs. The freedom trusts enjoyed as employers to determine pay rates and contracts with staff was greater than their financial freedom, but was constrained both by the staff’s retention of its existing rights and contracts when it transferred to trusts, and by the requirements of the specialist medical bodies.

**Residual Claims**

Trusts retained surpluses, but their use of these surpluses was governed by the operation of external financing limits (see text).

**Accountability**

Trusts were managerially accountable to the Secretary of State for Health via regional offices of the NHS Management Executive. They were accountable to the public through annual reports, which were discussed at a public meeting. Trusts were accountable to purchasers through the contracts they negotiated for the delivery of services.

(Box continues on the following page)
### Conclusions

There is no simple way of summarizing the experience of the United Kingdom with reforming the provision of health services. If the reforms have not fully delivered on the promises that accompanied their launch, the reasons include the contradictions inherent in managed markets, the failure to give sufficient attention to developing the purchasing function, and the time needed to make radical changes of this kind work in practice. Whether the result is a glass half full or half empty depends on one’s perspective.

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**Box 7.4 (continued)**

**Market Exposure**

The scope for competition varied from place to place. Where a market existed, the extent to which competition occurred depended on the willingness of purchasers to engage in selective contracting and the willingness of government to allow this to happen and to accept the consequences. GP fundholders were more inclined than health authorities to contract selectively with trusts but their impact was constrained by the limited range of services they purchased. Health authorities were discouraged from making major changes in their contractual arrangements with trusts in order to avoid destabilising the system.

**Social Functions**

Trusts continued to provide services to all patients and there was no evidence of discrimination against high cost service users. There were claims that inequity had widened as a result of GP fundholders using their purchasing power to gain faster access to services irrespective of clinical need, though the extent to which this happened is unknown.
These conclusions emphasize the clash between the logic of economic theories and the reality of political life. At root, the U.K. experience demonstrates not just the gap between intention and implementation, nor even the inertia built into existing institutions. Rather, it indicates that even well-crafted policies, filtered into impeccably designed agencies, will fail if politicians judge that the risks in implementing these policies exceed the benefits. What is therefore needed is an approach that acknowledges the political economy of health care reform given the inseparability of economic and political considerations.

Appendix 7A

National Health Service and Community Care Act 1990
Schedule 2
Specific duties

6. (1) An NHS trust shall carry out effectively, efficiently and economically the functions for the time being conferred on it by an order under section 5(1) of this Act and by the provisions of this Schedule and, with respect to the exercise of the powers conferred by section 5(10) of this Act and paragraphs 10 to 15 below, shall comply with any directions given to it by the Secretary of State, whether of a general or a particular nature.

(2) An NHS trust shall comply with any directions given to it by the Secretary of State with respect to all or any of the following matters—

(a) the qualifications of persons who may be employed as officers of the trust;

(b) the employment, for the purpose of performing functions specified in the direction, of officers having qualifications or experience of a description so specified;

(c) the manner in which officers of the trust are to be appointed;
(d) prohibiting or restricting the disposal of, or of any interest in, any asset which, at the time the direction is given, the Secretary of State reasonably considers to have a value in excess of such sum as may be specified in an order under section 5(1) of this Act and in respect of which the Secretary of State considers that the interests of the National Health Service require that the asset should not be disposed of;

(e) compliance with guidance or directions given (by circular or otherwise) to health authorities, or particular descriptions of health authorities; and

(f) the implementation of awards relating to the distinction or merit of medical practitioners or dental practitioners or any class or classes of such practitioners.

7. (1) For each accounting year an NHS trust shall prepare and send to the Secretary of State an annual report in such form as may be determined by the Secretary of State.

(2) At such time or times as may be prescribed, an NHS trust shall hold a public meeting at which its audited accounts and annual report and any report on the accounts made pursuant to subsection (3) of section 15 of the Local Government Finance Act 1982 shall be presented.

(3) In such circumstances and at such time or times as may be prescribed, an NHS trust shall hold a public meeting at which such document as may be prescribed shall be presented.

8. An NHS trust shall furnish to the Secretary of State such reports, returns and other information, including information as to its forward planning, as, and in such form as, he may require.

9. (1) An NHS trust shall be liable to pay:

(a) to the chairman and any non-executive director of the trust remuneration of an amount determined by the Secretary of State, not exceeding such amount as may be approved by the Treasury;
(b) to the chairman and any nonexecutive director of the trust such travelling and other allowances as may be determined by the Secretary of State with the approval of the Treasury;

(c) to any member of a committee or sub-committee of the trust who is not also a director such travelling and other allowances as may be so determined.

(2) If an NHS trust so determines in the case of a person who is or has been a chairman of the trust, the trust shall be liable to pay such pension, allowances or gratuities to or in respect of him as may be determined by the Secretary of State with the approval of the Treasury.

(3) Different determinations may be made under sub-paragraph (1) or sub-paragraph (2) above in relation to different cases or descriptions of cases.

Specific powers

10. In addition to carrying out its other functions, an NHS trust may, as the provider, enter into NHS contracts.

11. An NHS trust may undertake and commission research and make available staff and provide facilities for research by other persons.

12. An NHS trust may—

(a) provide training for persons employed or likely to be employed by the trust or otherwise in the provision of services under the principal Act;

and

(b) make facilities and staff available in connection with training by a university or any other body providing training in connection with the health service.

13. An NHS trust may enter into arrangements for the carrying out, on such terms as seem to the trust to be appropriate, of any of its functions jointly with any Regional, District or
Special Health Authority, with another NHS trust or with any other body or individual.

14. According to the nature of its functions, an NHS trust may make accommodation or services or both available for patients who give undertakings (or for whom undertakings are given) to pay, in respect of the accommodation or services (or both) such charges as the trust may determine.

15. For the purpose of making additional income available in order better to perform its functions, an NHS trust shall have the powers specified in section 7(2) of the Health and Medicines Act 1998 (extension of powers of Secretary of State for financing the Health Service).

**General powers**

16. (1) Subject to Schedule 3 to this Act, an NHS trust shall have power to do anything which appears to it to be necessary or expedient for the purpose of or in connection with the discharge of its functions, including in particular power:

(a) to acquire and dispose of land and other property

(b) to enter into such contracts as seem to the trust to be appropriate

(c) to accept gifts of money, land or other property, including money, land or other property to be held on trust, either for the general or any specific purposes of the NHS trust or for all or any purposes relating to the health service; and

(d) to employ staff on such terms as the trust thinks fit.

(2) The reference in sub-paragraph (1) (c) above to specific purposes of the NHS trust includes a reference to the purposes of a specific hospital or other establishment or facility which is owned and managed by the trust.

17. (1) Without prejudice to the generality of paragraph 16 above, for or in respect of such of its employees as it may determine, an NHS trust may make such arrangements for
providing pensions, allowances or gratuities as it may determine; and such arrangements may include the establishment and administration, by the trust or otherwise, of one or more pension schemes.

(2) The reference in sub-paragraph (1) above to pensions, allowances or gratuities to or in respect of employees of an NHS trust includes a reference to pensions, allowances or gratuities by way of compensation to or in respect of any of the trust’s employees who suffer loss of office or employment or loss or diminution of emoluments.

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Notes


9. This chapter draws on experience in the NHS in England. Similar trends were evident in the rest of the United Kingdom, although there were some differences in the organization of the NHS in those countries.


17. Ibid.


(c) The International Bank for Reconstruction and Development / The World Bank


23. Ibid.


34. Le Grand, Mays, and Mulligan, *Learning from the NHS Internal Market*.


CHAPTER 8

Maladjustments in the Corporatization Model: Hospital Reform in New Zealand

Graham Scott, Lynne McKenzie, and James Webster

This chapter, written in 1999, considers the corporate model for hospitals used in 1993–1999.

New Zealand, a country about the same size as the United Kingdom, spends NZ$8.0 billion a year on health care for its 3.6 million people. Publicly funded expenditure accounts for 77.1 percent of this amount. Private expenditure is mostly out-of-pocket spending by consumers on services (16.4 percent), on private health insurance (6.2 percent), and on charitable organizations (0.3 percent). Although private insurance accounts for a relatively small proportion of expenditure, 37 percent of the population has some private insurance coverage. New Zealand spends 7.6 percent of GDP on health, just below the OECD average of 7.7 percent.

Government funding covers a broad range of services: hospital-based care (emergency department, medical and surgical inpatient; outpatient, and hospital-based community services); disability support and mental health services (residential, specialist services, and community-based services for people with age-related, physical, sensory, or psychiatric disabilities); public health functions; primary
health care services; maternity care; other primary care–referred services (prescription pharmaceuticals, laboratory and radiology testing); accident-related health care, rehabilitation services, and income-protection insurance.

The government agency responsible for purchasing health services spends NZ$6.5 (US$3.2) billion a year, half of it on services provided by Crown Health Enterprises (CHEs), the government-owned hospital and related service providers. CHEs dominate the hospital sector, providing most of the acute and elective care in the tertiary and secondary sectors from hospital-based care and specialist services to community care and public health functions. Private hospitals focus on delivering nonacute services such as outpatient services and elective surgery.

Nongovernmental organizations (NGOs) provide general primary health care services, some specialist services, long-term care for the elderly and disabled, laboratory services, and services targeted to the indigenous Maori population. Since the reforms of 1993, the private sector has enlarged its role in delivering community-based disability support, mental health, and maternity services.

Accident-related services, including income-protection insurance, are funded and managed separately through the government-owned Accident Rehabilitation Compensation Insurance (ARCI). In July 1, 1999, the government enabled employers to purchase insurance from private companies to cover workplace accidents, however the government elected later in 1999 quickly nationalized that function.

For more than a dozen years, the government has been continuously remodeling its health system. From the mid- to late 1980s, hospitals were formed into area health boards (AHBs), a set of 14 regionally based institutions, governed by a board with a majority of locally elected members. In 1993, the AHBs were reformulated into 23 Crown Health Enterprises as part of the organizational reform discussed in this chapter. Four government-owned purchasing agencies, regional health authorities (RHAs), were established in 1993. They were merged in 1997 into one purchasing agency, the Health Funding Authority (HFA).

Under the AHB structure, hospitals were quite autonomous from the central government until the 1993 reforms. Paradoxically, these
reforms led to the use of more direct accountability mechanisms by the government as their shareholder, while establishing an arm’s-length contractual relationship with the purchasing organizations.

To understand the policies behind the reforms and the changes in the sector’s performance, we have examined official documents and reports. We have also relied heavily on information provided in interviews of people involved in the health system before, during, and after the reforms.5

Reforms: 1980s to 1993

In 1983, the government enacted legislation to create regional public sector agencies, area health boards, which managed public hospital services, community health services, and public health programs. AHBs were not responsible for most primary health care, which was provided mainly by private general practitioners, subsidized on a fee-for-service basis by the Department of Health (table 8.1).

Though highly autonomous, AHBs made little use of their freedom to contract out services. Decisionmaking by the elected board members was sometimes diverted from long-term rational service goals toward short-term political objectives. As a consequence, capital maintenance and investment spending sometimes took low priority to immediate service needs. By some reports, individual board members intervened so deeply in organizational management that they undermined management’s authority. By the end of the 1980s, the AHBs’ financial problems were apparent. Some large AHBs had borrowed extensively from the private sector, which perceived an implicit government guarantee. This posed fiscal risks to the central government since it lacked commensurate power to monitor and control the decentralized AHBs.

A change of government in 1990 brought the next set of health reforms, which had their genesis in a 1991 government white paper.6 This remodeling of the system created four regional health authorities—government-owned purchasers that received funding for a wide range of services. Initially, these public purchasers were to compete with private sector “alternative health care plans.” However, this idea
Table 8.1  Hospital Powers Pre- and Post-1993 Reform

<table>
<thead>
<tr>
<th>ITEM</th>
<th>AREA HEALTH BOARDS (1983–93)</th>
<th>CROWN HEALTH ENTERPRISES [FORMED IN 1993]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objectives</strong></td>
<td>• To promote, protect, and conserve public health and to provide health services</td>
<td>• To provide health and disability services</td>
</tr>
<tr>
<td></td>
<td>• To provide for effective coordination of planning, provision, and evaluation of health services between public, private, and voluntary sectors</td>
<td>• To provide those services in accordance with Statement of Intent and any contract entered into by it while operating as a successful and efficient business</td>
</tr>
<tr>
<td></td>
<td>• To establish and maintain appropriate balance in provision and use of resources for health protection, health promotion, health education, and treatment services (Section 9 Area Health Board Act 1983)</td>
<td>• To exhibit sense of social responsibility by considering interests of community in which it operates</td>
</tr>
<tr>
<td>Boards and</td>
<td>Majority of board members elected. Minority appointed by minister of health</td>
<td>All board members appointed by minister of finance and CHEs. Accountable to regional health authorities (RHAs) for service delivery and outputs and to minister for management of people and assets</td>
</tr>
<tr>
<td>accountability</td>
<td>Accountability through elections, open board meetings, and to minister empowered to dismiss boards</td>
<td>CCMAU monitored “ownership” matters. RHAs monitored service delivery against contract.</td>
</tr>
<tr>
<td>Monitoring</td>
<td>Department of Health monitored performance against contract. Monitoring by voters</td>
<td>Same as for AHBs</td>
</tr>
<tr>
<td>Residual claimant</td>
<td>Government, as owner, paid for losses despite a statement in the law that AHBs were not part of Crown. Gains tended to be spent on more services and higher salaries so public and employees were residual holders of gains.</td>
<td></td>
</tr>
<tr>
<td>Market exposure</td>
<td>Government monopoly for acute care with small number of private hospitals not in significant competition</td>
<td>Natural geographic monopoly with small number of private hospitals not in significant competition. Twenty-three CHEs</td>
</tr>
</tbody>
</table>
Table 8.1 (continued)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>AREA HEALTH BOARDS (1983-93)</th>
<th>CROWN HEALTH ENTERPRISES (FORMED IN 1993)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital finance</td>
<td>Depreciation included in overall capitated funding</td>
<td>Depreciation included in RHA revenue. Equity injections and loans from government</td>
</tr>
<tr>
<td></td>
<td>Borrowed from private sector</td>
<td>Also borrowed from private sector</td>
</tr>
<tr>
<td>Management decision rights:</td>
<td>AHB general managers had full delegations for these matters except for determining outputs,</td>
<td>Same as for AHBs but outputs were specified in much greater detail in contracts by RHAs; also, the State</td>
</tr>
<tr>
<td></td>
<td>setting user charges, and working with the State Services Commission on national labor</td>
<td>Services Commission was less involved in collective employment contracts, having only a consultation role</td>
</tr>
<tr>
<td></td>
<td>collective agreements.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Freedom to determine outputs was being reduced by contracts with minister of health.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Government set prices.</td>
<td></td>
</tr>
<tr>
<td>Provider payment</td>
<td>Capitated payment based on size and characteristics of population covered by AHB district.</td>
<td>Ninety percent of funding from RHAs was based on contracts to deliver specified volumes of services.</td>
</tr>
<tr>
<td></td>
<td>Small amount of bequests and gifts. Investment income. Adjustment for cross-boundary patient</td>
<td>Remaining funding came from user part charges, donations, investment income, and other government purchasers.</td>
</tr>
<tr>
<td></td>
<td>flows, based on service volume</td>
<td></td>
</tr>
<tr>
<td>Rationing decisions</td>
<td>Undertaken principally by AHBs, except where specified and agreed to by minister of health</td>
<td>RHAs acting under government policy, which included some specific directions on services to be purchased.</td>
</tr>
<tr>
<td></td>
<td>through contract</td>
<td></td>
</tr>
<tr>
<td>Social functions</td>
<td>Unspecified mandates for clinical teaching, research, services for other government departments,</td>
<td>Increased specification and explicit payment for these mandates</td>
</tr>
<tr>
<td></td>
<td>services for nonresidents</td>
<td></td>
</tr>
</tbody>
</table>

a. Other government purchasers included the Public Health Commission and Accident Rehabilitation Compensation Insurance.

Sources: Area Health Board Act 1983; Health and Disability Services Act 1993; authors’ knowledge of policies and practices.
was abandoned, and the RHAs operated as public sector regional monopolies.

Other new institutions included a Core Services Committee, set up to advise on the basic package of services to be funded by the public health system, and a special purpose commission, established to oversee public health policy and purchasing functions.

The public hospitals were established as government-owned companies, incorporated under New Zealand company law. Ministers held the shares and appointed the board members. The model of government-owned companies for hospitals was an adaptation of the earlier reform of government-trading activities into state-owned enterprises (SOEs). This influenced the choice of business structures, objectives, and personnel for the CHEs. The SOE reforms had been so productive that many advisers implementing hospital reform expected similarly high efficiency gains from the hospitals, including improved services, shortened waiting lists, and reduced costs.7

The wider context for these changes included a major exercise in developing policies to sharpen social expenditure targeting across all categories, including health spending. Copayments were introduced, and community services cards were issued to low-income people to reduce or negate their copayments.

**Major Changes: Area Health Boards to RHAs and CHEs**

The 1993 changes focused primarily on removing service planning and resource allocation from area health boards. These functions were placed in the RHAs as independent purchasing bodies, but politicians exercised considerable influence over purchasing decisions.8 The 1993 reforms did not significantly increase hospital autonomy and, as finally implemented, actually increased centralization of the health system’s national accountability. In practice, CHE decisionmaking was limited. For example:

- Decisions to exit major services and reconfigure facilities were sometimes reversed by ministers.
• Investments in major capital items had to be approved by ministers through business plans or separate business cases for large investments.

• Investments in new lines of business were sometimes discouraged; for example, politicians intervened in the offshore business developments of one CHE.⁹

• Strong stances in politically uncomfortable stand-offs with doctors were discouraged, for fear of strikes.

The financing of CHEs and AHBs differed. Service payments to AHBs were based on capitation under a broad contract to the minister of health. CHEs were expected to provide services specified by the RHAs under contracts that increasingly paid CHEs according to their output.

AHB decisionmaking was influenced by broad policy directions from the government and specific requirements from their communities, reflected through the decisions of locally elected boards. Under the 1993 system, the central government and its agencies decided many matters, including RHA pricing policies, CHE capital expenditures, and service rationalization in politically sensitive areas.

The monitoring regime involved less direct public scrutiny and influence over hospitals’ decisions. Local communities no longer elected board members and, unlike AHBs, the board meetings of CHEs and RHAs were closed to the public. The consultation obligations on the 14 AHBs moved principally to the four RHAs rather than the 23 CHEs, possibly leaving communities feeling they had less ready access to decisionmakers.

RHAs monitored the CHEs mainly on compliance with service delivery contracts. The Crown Company Monitoring and Advisory Unit (CCMAU) monitored the ownership interest on behalf of the shareholding ministers.¹⁰ The Ministry of Health monitored the RHAs on behalf of the minister of health. Under the former system, the Department of Health held all the monitoring functions on the area health boards.
Implementation during the 1993–96 Period

New Zealand’s health reforms took place in the context of a broad public sector reform, part of a drive to strengthen public agencies’ accountability to the national government. Corporatization and privatization were part of this reform agenda, invoked wherever normal service or capital market mechanisms were considered capable of providing direct accountability to consumers and shareholders.

When corporatization was applied to the health system, strong societal values came to the fore, favoring universal health care as a largely free public service. The public did not accept the premise that an organization with commercial objectives could be given appropriate incentives to provide high-quality health care to all.

The 1993–96 period was a testing time for the sector. The policy framework for the reforms was marked by continual ad hoc changes that diluted the original design of the reform. First, elements of competition were removed, and no arrangements were developed to deal with the resulting bilateral monopolies engaged in the purchasing and provision sides of the sector. Tensions resulted that were exacerbated by poor information on service levels, quality and costs, and funding issues. The following sections discuss the formal arrangements, the market, financial aspects, and the implementation of the reforms during the 1993–96 reform period.

Legal Structure, Governance, and Accountability Arrangements for CHEs

The structural and accountability arrangements for CHEs were more attuned to a competitive model, with an arm’s-length relationship to the government, than the model that developed in practice.

**Legal framework.** As noted, CHEs were government-owned companies set up under the Health and Disabilities Service Act of 1993, with the ministers of health and finance as the only shareholders. They were subject to the Companies Act, which made directors personally liable for their decisions regarding the company’s financial
viability. In reality, most CHEs held letters of financial support from their shareholding ministers. Boards thus faced no financial risk.

Revisions in the legislation in 1998 altered CHEs’ objectives, reducing the emphasis on efficiency and specifying that they should operate as not-for-profit organizations.

Decision rights. At first sight, the CHE boards appeared to have wide discretionary powers over the governance and management of their organizations. They could hire employees on individual or collective contracts in accordance with New Zealand’s general labor laws and raise private sector debt. Less tightly monitored on their financial situation than AHBs, they also had more freedom to manage their cash.

Although CHE boards seemed to have a loose rein, the government made many significant decisions affecting CHEs such as determining plans for capital and service development. CHE boards could resist informal directions from ministers and the monitoring agencies on the grounds that the Companies Act gave them business management responsibility. On occasion, informal directions raised questions about whether the parties giving the directions could be deemed directors of the CHE. Pressure put on the boards by ministers was not always transparent. In practice, boards that persistently ignored ministers’ wishes risked losing their members, but this did not always deter the boards.

Reputational risk from dismissal from the board was small, partly because many board members resigned, with or without pressure from the government, without any loss of reputation. Some resignations were provoked in disputes with the government over funding for board members’ community hospitals, but the reasons for other departures often were not clear.

Accountability arrangements. The accountability arrangements for the CHEs had four main components: board appointments, the statement of intent, their business plans, and their purchase contracts.

• Board appointments. The ministers engaged the CHE chair and board members, usually by a simple letter of engagement, with no
explicit statement of expectations. It was an accountability lever with some potential to be used more effectively.

- **Statement of intent.** The statement of intent, prepared under the Public Finance Act, was submitted to the minister and tabled in Parliament. The general purpose of these statements, required for all Crown entities, was to inform Parliament about the entity’s main purposes and direction. CHEs did not always consider these statements important documents, a partial reflection of weaknesses in performance monitoring of these documents by the parliamentary select committees and ministers.

- **Business plan.** Each CHE agreed with the ministers on its business plan. The plan contained strategic objectives, projected capital expenditures, planned service changes, changes in asset configurations, projected revenues, projected costs, and financial forecasts. Business plans were used as the basis for agreeing on deficit funding from the Crown and equity funding for capital development. The business plan carried much more weight with CHE boards and management than the statement of intent or the purchase contract and became the main tool for controlling the CHEs. Failure to meet business plan fiscal targets usually resulted in problems for CHEs, and sometimes in the removal of the chairs and the CEOs.

- **Purchase contracts.** The purchase contracts, initially with the local RHA and later the Health Funding Authority, accounted for 90 percent of CHEs’ revenue. These agreements were legally based contracts for the delivery of specified services at agreed prices.

  Purchase contracts held little weight with CHEs initially. When contract breaches occurred, the parties did not take strong action. Though separate legal entities, these contracts were de facto internal government contracts. The threat of enforcement lacked credibility because of reluctance to go to court. Centrally imposed political solutions were the usual method of resolution. In serious disputes between RHAs and CHEs, officials or ministers intervened, complicating the contractual relationship. Their involvement reflected the
lack of solid information about the contended issues, which is needed for a rational and transparent approach. On occasion, ministers or central agencies put pressure on the parties to sign contracts that left major issues unresolved or contained unrealistic provisions.

**External Environment: Market Structure and Purchasing Arrangements**

The CHEs were set up around 24-hour acute care facilities. This was done to encourage competition between CHEs in services where competition was practicable, given the geographical catchment areas for acute services. Under these configurations, however, some CHEs were not clinically and financially viable. This problem was known when they were set up. The rationalizations and mergers that CHE designers expected did not materialize. Apart from one merger, the remaining 22 CHEs retained similar configurations, and potentially unviable configurations persisted. Nor did CHEs cooperate well in planning, managing, and developing services.

No capital market or clear administrative process impelled takeovers or mergers, which would have required detailed ministerial involvement. The Crown Company Monitoring and Advisory Unit had little success encouraging CHEs to consider mergers. Instead, the unit appointed common board members to CHEs that could benefit from joint service rationalizations.

Geographical monopoly over 24-hour acute care services prevented competition for their delivery. Ministers discouraged some CHEs from looking for business in the catchment areas of other CHEs. Private providers won bids from CHEs in some localities but, to prevent purchasers from threatening the public hospitals’ viability by selectively shifting services to the private sector, formal procedures were imposed.

Some remarkable expansions in private delivery occurred in continuing care, disability support, and mental health services in the deinstitutionalization program (only a small part of all CHE services). Particularly with continuing care and disability support services,
there was a ready private market. The RHAs purchased these services competitively but consumers, when allowed a choice, chose private facilities. As a result, many CHEs exited these services.

Little competitive purchasing of elective surgery occurred; less than 5 percent for the most active RHA in this area. Although the private hospital market for elective surgery was established, difficulties arose. There were concerns about clinical viability if CHEs lost too many surgical cases. Rarely was the private market cheaper than the CHEs. Private hospitals believed CHEs were underpricing and shifting costs onto their government-funded deficits. Some doctors in public hospitals resisted competition and did not want to release waiting list details to the successful bidder, nor were they always eager to execute contracts won by the CHE they worked for. Some consumers did not wish to move out of their local area for treatment. The resistance of doctors and consumers created tensions that jangled political nerves.

The bilateral monopoly between the government’s purchasers and providers meant that prices were difficult to determine, and sometimes contracts settled, if they settled at all, on the side of the party with the strongest bargaining power. RHAs sometimes used their dominant position to offer “take-it-or-leave-it” deals, backed by their statutory powers to impose their terms.¹⁷

In a commercial environment, such bilateral monopolies recognize that failure to agree on workable arrangements with each other would result in the loss of mutual gains. The parties might be expected to move toward one of two scenarios: a long-term contract, specifying how the parties would distribute surpluses and risks and behave under future unforeseen circumstances requiring contract adjustments; or vertical integration, so that the tools of governance could be used to manage transactions under a common maximization objective. The CHEs, in their environment of poor accountability, instead used political and other pressures such as the media to extract gains.

**Competition.** New Zealand’s competition laws and supporting organizations have been little concerned with health sector issues. Problems have arisen with the market definition, a prerequisite to discov-
ery of monopolistic abuse in the market. Monopoly issues have been addressed piecemeal and dealt with inconsistently in the contracting processes. For example, some contracts have restricted a provider’s market share.

Separating the CHE contracts into contracts for services and contracts for facilities proved to be one way to improve the market. This enhanced the purchasers’ ability to target changes directly to the clinical decisionmakers and to design contracts that provided incentives for them. This approach is operated for maternity services where CHEs held contracts to provide facilities, while other organizations had contracts to provide clinical services.18

**Purchasing arrangements.** The complexity of the CHEs’ outputs created measurement and contracting problems. RHAs could not specify services and prices in sufficient detail to allow CHEs to calculate whether their deficits were due to inefficiencies, faulty measurements, pricing peculiarities, or a combination of these factors. The initial RHA/CHE contracts specified service levels in very broad terms. As these service levels were refined into detailed measurement units (e.g., diagnostic-related groups for hospital inpatient services), prices and volumes were adjusted accordingly. Each CHE’s revenues shifted from year to year with changes in purchase unit definitions and prices. Revenue swings also occurred as CHEs improved their information systems. Many services not previously captured by information systems were recorded. These revenue shifts undermined the credibility of the contracts, the contracting process, and the parties, and made planning difficult for all.

All these problems created an environment of conflict, which the government attempted to manage by ad hoc interventions instead of analysis and action to deal with the underlying issues. Noteworthy government interventions in the contracting arrangements were the setting of revenue and service levels for CHEs in 1993–94 and the central agencies’ allocation of overall revenue for CHEs in 1994–95. Both activities were based on rudimentary service-cost estimates.

CHEs resisted signing contracts. In an environment with poor information and no realistic options for alternative providers, CHEs
could refuse to sign contracts with few consequences. Commonly, in any one year, half the CHEs operated without formal service and revenue contracts.

**Funding and Financial Structures**

Publicly funded health care will always generate financial tension—the system’s built-in budget constraints will run head on into growing demand and expectations from the community, as expressed through the political system. However, more financial tension than expected accompanied the 1993 New Zealand health care reforms for several reasons.

*Purchaser funding.* Ministers and their advisers had unrealistic expectations of the efficiencies that could be achieved and thought they would allow a match between funding and demand for services. Extracting efficiency gains in an environment of static or declining real revenue early in the reform proved difficult.

Historically, many services were funded by open reimbursements, and RHAs made steady but slow progress in negotiating new arrangements for capping budgets and sharing financial risk with providers. For example, the movement of primary medical services from fee-for-service to capitation was slowed by resistance from entrenched provider interests. Although the RHAs tightened management control over expenditure in some demand-driven areas, these measures had little impact on services driven by clinical decisions. The pressure on fee-for-service budgets encouraged RHAs to resist CHEs’ requests for price and service increases.19

*Financial stringency.* The reforms were implemented in a period of financial stringency. In 1988–89, when most area health boards were created, real per capita funding for health was NZ$1,391. This was reduced to NZ$1,292 the following year, and did not reach the 1988–89 level again until 1996–97.20 By 1992–93, hospital boards, then AHBs, had operated for a decade with the same revenue.21 In 1992–93, AHBs ran an aggregate deficit of NZ$66.1 million (−2.5 percent of costs).22 In 1993–94, the CHEs’ first year of operations, the deficit was NZ$175 million (−6.6 percent of CHE costs).
The reforms’ transition costs were not financed in their initial years and showed up largely as higher CHE deficits. In the first year of the reforms, the RHAs’ revenue was lower than the cost of AHB services the previous year and lower than the CHEs’ projected costs for 1993–94. The RHAs’ costs were covered by reducing CHE revenue by 2 percent. CHEs were expected to absorb the set-up costs the first year, along with the costs of inflation—while maintaining the previous year’s output and range of services.

Many AHBs were believed to have run down their assets and understated their depreciation expenses to improve their short-term reported financial condition. When the CHEs were formed, asset values were written down and debt was written off. The likely reasons for these large write-downs of assets were the unrealistically low depreciation rates on AHB assets and a high degree of redundancy and obsolescence; many facilities were overdesigned in relation to the services they were delivering.

The government established CHEs with an opening debt position based on debt-equity ratios typical in commercial companies, and provided further loans to finance cash deficits, restructuring costs, and any urgent capital expenditure. This was part of a policy regime to simulate corporate financial structures so that CHEs had to confront the opportunity cost of capital in a way that encouraged them to focus on the value of the business as a whole. The CHEs were to refinance this debt from private sources over time. To encourage this shift, CHEs were charged above-market interest rates. Shifting their borrowing from the government to the private sector was to have put CHEs on the same footing as private firms, and private lenders were expected to assume a monitoring role. In July 1993, the aggregate CHE debt held by the government stood at NZ$289.7 million. By June 1997, this debt had decreased very little, to NZ$280.1 million, while borrowings from other sources amounted to NZ$305.5 million. The total debt-to-equity ratio was 68 percent.

A pivotal requirement for private debt to be an effective monitoring influence on CHEs was that the government not guarantee the debt. CHEs were required to place a disclaimer in debt contracts to emphasize this. In practice, private lenders perceived CHEs as government-guaranteed, regardless of disclaimers, inasmuch as govern-
ment was not thought likely to allow a CHE to fail in case of financial disaster. Although many CHEs were in serious financial trouble, none failed to service its creditors. In these circumstances, the value of monitoring by private financial institutions would be unlikely to exceed the extra cost of private debt above the government’s lower borrowing cost. If the government wished, it could have used its borrowing powers to secure cheaper funds and lend these to CHEs at lower rates than the artificially high rates used to encourage CHEs to move financing to the private sector.

Though expected to earn a normal return on equity, CHEs rarely did so until the 1998–99 financial year. From 1993 to 1997, no more than three CHEs ran a surplus in any one year. CHEs did not act like typical commercial businesses, often delivering services beyond their funding. CHEs that cut off services upon reaching contracted levels were, on occasion, directed by the government to provide them. CHEs were also restrained from exiting from unprofitable services, which contributed to the deficits most CHEs experienced.

This account of the structuring of the CHE finances reveals many problems. Not all these problems should be seen as a negative aspect of the reforms—in fact, quite the reverse. The CHEs’ financial and accounting systems had not previously followed the standards required under general company law and “generally accepted accounting practice.” Introducing these requirements brought to the surface long-concealed problems in the hospitals’ underlying financial conditions, just as corporatization had in government-owned enterprises. The proper financial values of obsolete, run-down, and underutilized capital stock began to be revealed. This step was vital to put hospitals on a sound footing.

Government’s response to a difficult financial situation and underdeveloped management systems was piecemeal. Constant adjustments in funding to address specific problems undermined incentives for financial discipline. Holding back on capital maintenance and development and on staff training helped bridge the financial gap, but only in the short term.

Financial pressures manifested themselves in different places at different times, wherever the weakest point was located. Due to
widespread unrealistic expectations, hospital finances can be seen, with hindsight, to have been out of equilibrium from the beginning.

The Reform Process

A number of agencies were involved in implementing the reforms in the 1993–96 period. No one agency or person had overall control of the implementation phase below the ministerial level. Policy and implementation of purchaser and provider reforms were managed separately. As a result, inconsistent and confusing policy messages exacerbated inherent tendencies for conflict between RHAs and CHEs.

The reforms were implemented in a top-down, “big bang” manner. An 18-month implementation period was planned, after the release of the government paper in 1991, for the disestablishment of old entities and the creation of new ones. RHAs were formed in October 1992 and given 8 months to set themselves up to take on purchasing from 23 new CHEs as well as other providers. At the same time, the 23 CHEs were being set up. Purchasers and providers were struggling with poor information, inadequate systems, and the need to hire and rapidly train staff for the new roles. Finding suitable people for the management and board positions was difficult, given the small pool of available talent, the many open slots, and the timing of recruitment.

The policy framework in the government’s paper relied on the creation of purchasers, providers, and monitoring agencies that could quickly comprehend and start to perform their roles. Acquiring the necessary skills and information took the institutions a long time and, in some areas, they were still not well developed by the next restructuring in 1997. The expectations of rapid gains in health service planning and delivery turned out to be unreasonable in terms of the time and resources needed to build new organizations.

Stakeholders and Communication

The instigators of the New Zealand health reforms were politicians, managers, and civil servants. Change was resisted by public sector health unions and the Medical Association, which perceived no benefit and some threat from the reforms. Parliamentary opposition par-
ties of the Left supported these groups. Health reform thus became a party-political issue—with attendant risk of policy reversal in a change of government. The views of the general public, patients, and health sector suppliers were muted in the policy debate and implementation process.

To explain reform to the public, a special communications unit was established, public meetings were held around the country, and mass media and leaflet drops were used. Nonetheless, many health sector participants interviewed for this report did not consider the communication effort a success. The campaign tried to sell reform instead of first explaining the problems reforms were intended to address. The public was not very aware of the previous system’s problems or their structural origins. Hence, the reforms were hard to promote as a solution to such popular concerns as waiting lists for nonurgent surgery. Particularly unpalatable were the increases in patient copayments that accompanied the reforms and contributed to an impression that the focus on increasing financial restraints and reducing the state’s role in financing health care would impair delivery of quality health care to the public.

In a tough budget speech to the Parliament, the minister of finance announced the reforms. In an environment of fiscal crisis and spending cuts, many people saw the health reforms as cost-cutting measures for which they would receive few benefits.

Senior politicians gave no strong public impression of unified leadership. Many government politicians, other than the ministers directly involved, did not fully understand the reforms. Major changes in the original policy made the messages harder to explain.

Changes in Policy and Structures after 1996

After a change of government in 1996 to a coalition that stressed social spending, decisionmaking was further centralized. The scope for provider competition was reduced, and CHEs were given nonprofit status. The parliamentary Opposition parties continued to call for more extensive policy reversals.
The Coalition Government’s health policy led to the merger of the four RHAs into the Health Funding Authority. At an operational level, two developments affecting CHEs are of interest: national contracting and strengthened accountability for the Health Funding Authority.

**National Contracting**

The Health Funding Authority (HFA) standardized the measurement units used across New Zealand so that prices and services could be compared across providers. The prices were set at a flat payment per unit across all CHEs, with limited variations to account for the costs of tertiary services and diseconomies of scale in small hospitals. Essentially, a national approach replaced 23 separate bilateral negotiations on price.

This pricing approach involved calculating the efficiencies CHEs could generate from their current operating costs. These efficiencies were estimated using Data Envelopment Analysis, which modeled the production frontier for specific services. This work resulted in price increases that eliminated the deficits of 10 CHEs.

**HFA Accountability**

The new system introduced a much stronger accountability framework for the Health Funding Authority, based on a strategic business plan developed with key stakeholders. The plan underpinned the formal external accountability requirements and was integrated with the management plans and internal accountabilities. The plan included a “Service Coverage Document” that set out the services to be provided from public funds. The framework described the outputs of the Health Funding Authority such as contracting for services, monitoring and payment, priority setting, and policy advice on service mix. The costs of these outputs were to be increasingly identified and refined. Money for the Health Funding Authority’s outputs was appropriated separately from its purchasing fund. This new framework was expected to markedly lift the quality of planning and management and increase transparency.
Assessment of the Impact of Organizational Reforms in New Zealand

How did these reforms affect technical efficiency, allocative efficiency, clinical outcomes, consumer satisfaction, and equity of access? No comprehensive examination has been done in these terms. One study that compared CHE and AHB performances concluded:

CHEs are large, complex organizations with a high public profile and which operate in a dynamic external environment. Analyzing relative and absolute performance in this context is a difficult task. It is dangerous and unfair to form superficial conclusions about either individual or aggregate CHE performance. Reasonable conclusions can only be drawn on the basis of detailed analysis and having due regard to the performance of all components of the institutional framework within which CHEs operate.32

Our comments can thus be only tentative. Because of a lack of systematic evidence, our judgments involve an unavoidable element of subjectivity.

Technical Efficiency

An examination of hospital board and AHB technical efficiency over a decade concluded that this component of performance did not change significantly during the reform period.33 CHEs had to make only small gains to better their predecessors, but cost and output data throw little light on the differences between AHBs and CHEs. They were recorded neither fully nor consistently and therefore cannot be compared across structural modalities.34

From 1989–90 to their final year, 1992–93, AHBs moved from a surplus of NZ$41 million to a deficit of NZ$66 million. The fluctuations in cost changes mirrored revenue changes for two years, with a large swing from increases to decreases. In their final year, costs increased while revenue decreased (table 8.2).
CHEs ended their first year of operations in 1993–94 with deficits of NZ$175 million and continued with deficits of up to NZ$201 million but achieved a reduction, to NZ$39 million, in 1998–99. The provisional figures for the first six months of 1999–00 showed a small surplus (table 8.3). In 1993–94, the government mandated the revenue levels. Revenue fell; costs continued to increase. The government centrally set aggregate CHE revenue levels again in 1994–95. Costs grew at 5.0 percent and revenue at 4.6 percent over the previous year. In 1995–96 and 1996–97, CHEs and the four RHAs had slightly more scope to negotiate contracts. During these years, costs grew around 5 percent a year; revenue increased between 4.6 percent and 6.8 percent a year.

After undertaking an efficiency analysis of the CHEs in 1998, the government agreed to increase the Health Funding Authority’s funding by NZ$129.5 million to pay price increases to the CHEs. The CHEs’ revenue increased 8.2 percent between 1997–98 and 1998–99, due partly to price increases and partly to differences in service levels and mixes. The trend in cost increases slowed, showing

### Table 8.2 Area Health Boards: Aggregate Trends in Costs and Deficits

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<tbody>
<tr>
<td>Deficit/surplus (NZ$ million)</td>
<td>41</td>
<td>–2</td>
<td>–12</td>
<td>–66</td>
</tr>
<tr>
<td>Costs (NZ$ million)</td>
<td>2,456</td>
<td>2,626</td>
<td>2,571</td>
<td>2,628</td>
</tr>
<tr>
<td>Deficits as percentage of costs</td>
<td>1.7</td>
<td>–0.08</td>
<td>–0.5</td>
<td>–2.5</td>
</tr>
<tr>
<td>Percentage change in costs over previous year</td>
<td>6.9</td>
<td>–2.1</td>
<td>2.2</td>
<td></td>
</tr>
<tr>
<td>Percentage change in revenue over the previous year</td>
<td>5.1</td>
<td>–2.5</td>
<td>–0.3</td>
<td></td>
</tr>
<tr>
<td>Percentage change in consumer price index</td>
<td>2.8</td>
<td>1</td>
<td>1.3</td>
<td></td>
</tr>
</tbody>
</table>

Note: CPI figures are for all groups of products and services, with the index based on the June 1999 quarter. The CPI for each CHE financial year is taken as the percentage change for the June quarter over the June quarter of the previous year. Statistics Department Tables, Wellington, 1999.

cost increases over the previous year of 2.5 percent for 1997–98 and 3.5 percent for 1998–99. To understand why costs increased more slowly would require detailed analysis. One causal factor may have come from the HFA’s work with CHEs to carry out extensive efficiency studies of their services. This work was the basis for implementing a national purchasing framework that included national prices for services.

AHB and CHE cost trends should be considered in relation to general cost trends. AHB costs fluctuated above and below the percentage increase in the consumer price index. After 1992–93, CHE costs rose above the consumer price index in increasing amounts, reaching a difference of 4.7 percent in 1996–97. In 1997–98, the gap closed to a difference of 0.8 percent but again widened in 1998–99, to 3.9 percent.

Cost trends should also be considered against output and complexity. This is difficult because of poor information on noninpatient services and changes in the recording of inpatient and day-patient services. There is a paucity of useful data to make comparisons over time. This is due in part to the variable purchasing frameworks used by the four RHAs before the creation of a national purchasing framework and the constant adaptations in these frameworks.37

Table 8.3 Crown Health Enterprises: Aggregate Trends in Costs and Deficits

<table>
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<tbody>
<tr>
<td>Deficits (NZ$ million)</td>
<td>-175</td>
<td>-194</td>
<td>-159</td>
<td>-201</td>
<td>-176</td>
<td>-39</td>
</tr>
<tr>
<td>Costs (NZ$ million)</td>
<td>2,657</td>
<td>2,790</td>
<td>2,932</td>
<td>3,102</td>
<td>3,180</td>
<td>3,291</td>
</tr>
<tr>
<td>Deficits as percentage of costs</td>
<td>-6.6</td>
<td>-7.0</td>
<td>-5.4</td>
<td>-6.5</td>
<td>-5.5</td>
<td>-1.2</td>
</tr>
<tr>
<td>Percentage increase in costs over previous year</td>
<td>1.1</td>
<td>5.0</td>
<td>5.1</td>
<td>5.8</td>
<td>2.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Percentage increase in revenue over the previous year</td>
<td>-2.7</td>
<td>4.6</td>
<td>6.8</td>
<td>4.6</td>
<td>3.6</td>
<td>8.2</td>
</tr>
<tr>
<td>Percentage change in consumer price index</td>
<td>1.1</td>
<td>4.6</td>
<td>2.0</td>
<td>1.1</td>
<td>1.7</td>
<td>-0.4</td>
</tr>
</tbody>
</table>

Firm baselines on output are hard to find, and rarely can quality data, collected against baselines, be located. At a high level of aggregation, CHEs increased hospital discharges by 12.6 percent between 1994–95 and 1996–97, an average increase of 4 percent each year. Total outpatient attendances increased by 3 percent between 1994–95 and 1995–96, but dropped back down to 1994–95 levels in 1996–97. Hospital discharges and outpatient services accounted for 52 percent of CHE revenue. For the inpatient services measured by discharges, a tentative observation can be made that workloads increased at a rate close to the increase in costs. This leaves output levels for about half of CHE services unexplained and, in these circumstances, no firm conclusions can be drawn.

Under the AHBs, the average length of stay fell 18 percent between 1989–90 and 1992–93 and by 13 percent between 1993–94 and 1996–97 under CHEs. CHEs continued the trend toward reducing average stays, but no comment can be made about the adequacy of the reduction, partly because of the increasing difficulty of reducing the average length of stay as it progressively shortens.

Day surgery increased by 61 percent between 1989–90 and 1992–93 under AHBs and by 17 percent between 1993–94 and 1996–97 under CHEs. The same limitations on drawing conclusions from the available data also apply to day surgery. In terms of equity and quality, useful data on baselines and the measurement of gains are lacking. The RHAs did not have well-developed systems to specify, measure, and monitor these factors.

Subjectively, views have been expressed that gains were made in the governance and management systems in CHEs. Business cases were now expected for capital developments, and cost benefit analyses were required. Some of the individuals interviewed thought the CHEs understood their services and costs better than AHBs did and operated better management systems. The quality of information was considered to have improved. One CEO said that the costs of domestic services such as catering and cleaning were reduced but that the more difficult gains, associated with changing clinical practice, were not widely achieved.
CHEs exited services where they could not compete with other providers—mainly residential care for the elderly and community services for mental health and disability clients. This movement began under the AHBs, but they could not have achieved the amount of change that occurred. This judgment is based on our experience in dealing with powerful resistance from hospitals, worried patients, and hostile communities when consulting them about moving services to nonhospital providers. AHBs would have been more exposed to these pressures than RHAs and CHEs, due to the influence of elected boards. CHEs lost a significant portion of the residential and community care business, but with the wisdom of hindsight, by 1999 they had little or no desire to be involved in these areas.

Barriers to achieving gains in CHEs. The CHE chief executive officers interviewed for this report commented on the barriers they faced in improving efficiency. These included:

- The power of the doctors to resist changes was significant. They were not easily replaced, and some had objectives that aligned with their private practices rather than the CHE’s objectives—they had conflicting obligations to their professional bodies, patients, and the CHE. Many managers were new to the health sector and could not assess the demands and arguments of clinical staff.

- Deficit financing gave CHE boards an excuse when costs exceeded revenue and reduced the pressure to make hard decisions.

- CHE boards were often reluctant to reduce services when they exceeded the volumes set by the RHAs.

- Whether deficits stemmed from inefficiencies or problems with RHA pricing, which varied around the country, was not clear. Prices were not linked to value, and the variations were not explicable on this basis.

- Staff resisted changes, and managing change took considerable effort. Sometimes retaining the status quo was easier.
• The public resisted changes, particularly around the centralization of services. Changes strained the CHEs’ scarce management resources.

• Politicians did not always support changes and at times intervened.

• The RHAs did not provide strong incentives for change. Their contracting requirements were unsophisticated and their monitoring, weak.

Other factors affecting the ability of CHEs to make gains were their limited scope to expand their revenue, the requirement to maintain the same range and level of services in the initial year of the reforms, active political resistance to rationalizing services, and problems with the balance sheet set-ups. CHEs debated balance sheet issues with central agencies over a two-year period. Some CHEs expressed concern that inaccurate valuations placed them on an unfair footing compared with other CHEs.

Allocative Efficiency

There is no empirical analysis of the effects of the reforms on allocative efficiency, although a range of policies was introduced to further this objective:

• “Single-pipe” financing of primary, secondary, and tertiary care to allow resources to be shifted between these levels of care within an overall global budget limit

• Allocation of funds to regions (RHAs) according to a needs-weighted, population-based formula

• Specification of priorities for health improvement (such as Maori health) and of public health targets (such as immunization and cervical screening coverage targets)

• Introduction of evidence-based clinical guidelines for a range of common conditions and services
• Introduction of booking systems, based on clinical guidelines for elective surgery

• Reference pricing for prescription medicines within therapeutic groups, based on evidence of clinical value and cost-effectiveness.

Some impacts of these initiatives on resource allocation can be identified, including: increased spending on Maori health programs, shifts in pharmaceutical expenditure, reallocation of rural health expenditure from inappropriate hospital services to community health services, and reduced regional disparities in expenditure. However, these positive changes were overshadowed by other factors. RHA boards were consumed with the problems of dealing with powerful provider interests that assumed, from experience, that public money would be available to them as a de facto monopoly service provider. Some CHEs also believed, from experience, that the government could not permit them to suffer serious financial loss and would rescue them from bankruptcy.

While the allocation methods of the RHAs and, later, the Health Funding Authority had considerable scope for development, work was done on using transparent and analytical approaches, including “program budgeting and marginal analysis.” Formal rationing criteria, and a decision-making process for choosing services to fund, was part of the Health Funding Authority’s early work. The biggest step in this direction was the introduction of a system for specifying maximum waiting times for elective surgery, based on clinical assessment.

**Clinical Outcomes**

The link between the new system and its impact on clinical outcomes and health status has not been assessed. This would be difficult, considering the many factors influencing health status besides the efficiency and effectiveness of the organizational or institutional arrangements.

In the areas of population health gain, it is also too early to identify the results. It is reasonable to expect good results from contracting systems focused on targeting services to disadvantaged sectors of
the population and using local networks to reach people who have been underserved by the traditional system.

**Consumer Responsiveness and Satisfaction**

No systematic information on consumer responsiveness and satisfaction is available. Many community groups that were provided with resources and skills to deliver various primary care services say the reforms made new opportunities and services available to them. Purchase contracts did not emphasize consumer surveys, perhaps in part because rationing issues dominated dialogue with communities.

Although the public no longer had access to locally elected representatives on health boards, they had a collection of substitutes. Government appointees on boards had to be responsive to their communities. Also, the central government established several special-purpose health policy and monitoring organizations for Maori health, mental health, and general health policy. A commissioner was set up to conduct inquiries into service failures. Many local governments became involved in health service planning issues.

In 1998 and 1999, several surveys of consumers and citizens were done. The results of a fragmentary study based on a telephone survey of 1,000 people can be seen in table 8.4.

Other surveys have had similar results. Respondents to a Ministry of Health survey said big changes were needed in the system (50 percent) and hospital waiting lists were a problem (47 percent). An HFA survey found that 55 percent of respondents rated the government’s performance poor but that 75 percent of those who had used health services were satisfied. This pattern also appeared in the Ministry of Health survey. There is clearly a gap between what people think the services will deliver and what they do deliver, with dissatisfaction about the system in the abstract but greater satisfaction in practice.

Concerns over the health sector have featured in national politics. Many of the debates have been about rationing issues such as rationalizing small hospitals, waiting times for surgery, and limiting care in a few high-profile cases. A *National Business Review* poll before the November 1999 election showed 20 percent rating health as the
most important issue deciding their vote, ranking second behind the economy (25 percent).

**Equity of Access**

The reformed system had strong incentives toward equity of access in a number of dimensions. The Health Funding Authority, as a national organization, had to establish national access criteria and made progress in several areas. The work on waiting times for surgery is a prime example, but there were other significant moves to even out inconsistencies that arose by having the four RHAs. A major problem under the previous system was that the politics of the AHBs had sustained capacity for surgery in provincial areas beyond what could be justified by national criteria. The RHAs and the Health Funding Authority made considerable changes in this regard, reducing or eliminating purchasing of inappropriate services in smaller hospitals.

**Conclusions**

While there is a lack of comprehensive analysis on the successes and problems of New Zealand’s health reforms, three problems stand...
out. The reforms lacked a coherent policy framework due to last-minute changes in design. They were hampered by considerable funding problems that underpinned some of the implementation problems. Implementation was poor in many respects, with unsatisfactory ad hoc patches being applied to the system. Problems with policy, finances, and implementation are easy to identify, but changes in the quantity, quality, or efficiency of the CHEs are less easy to pinpoint, given the lack of comparative data. In these circumstances, we must be cautious about drawing conclusions and lessons for other countries. The following points emerge from the material presented in this chapter.

Other countries attempting such reforms should base their design on a comprehensive understanding of the situation in the health system as a whole, even if implementation processes are focused on particular areas. In other words, systemwide thinking is imperative in countries like New Zealand, whose governments set ambitious and far-reaching goals for health policy. Implementation should be sequenced and geared to practical capabilities.

Ideally, reform should be driven by a policy framework that identifies government’s role, sets priorities, recognizes generally what institutions are required to deliver, and establishes the necessary regulatory environment. As health care is a complex system, this can be a process of discovery, retaining the basic framework of principles but adjusting the details as experience adds information on successes and failures.

Reform objectives and barriers to reform will vary from country to country. Characterizing health reform internationally as having similar policy with local variations (as is the case with privatization policy) is likely to be very misleading. The details are the telling points. Superficially, New Zealand’s reforms look like an application of its previous corporatization policy, but the details show that they departed from the critical principles for the success of that policy. Also, they did not entail moving from centrally managed to more autonomous hospitals. Though originally designed as a decentralization of health management, with the policy modifications, they became a recentralization in many respects. The AHBs already had considerable autonomy. The reforms focused mainly on moving ra-
tioning decisions away from hospital management to four indepen-
dent government purchasing agencies, and later to one. There was
a shift from funding hospitals based on populations served to ser-
vice purchasing by government purchasers that received funding ac-
cording to a broad demographic formula, applied to the population
served by each purchaser. This amounted to increased central con-
trol through:

• The purchasing role of the RHAs and the Health Funding Au-
thority

• The influence of the monitoring agency and shareholding minis-
ters on the CHEs’ business plans and capital spending

• The influence of the minister of health by setting goals for the
RHAs and Health Funding Authority and advising these agencies
of preferences.

In New Zealand, wider objectives were rapidly subsumed by the
goal of increasing efficiency, or achieving financial viability, in the
public hospital sector. This was mainly in response to the financial
problems built in when the reforms began. Countries seeking effi-
ciency increases in a government-owned hospital sector may wish to
note the following points:

• Top-down restructuring should not be expected to produce the
same gains in health as in other sectors. This probably stems from
the predominance in the health sector of powerful provider and
consumer interests and high political sensitivity to the life-and-
death issues of health. The people who control the services at the
customer end are not happy to have their processes reengineered
from the top.

• Fiscal pressures early in the reforms can make implementation
difficult. Realistic assumptions have to be made about any effi-
ciency gains that can be expected.

• Staff members will resist change and can be in a powerful position
to do so if they are in scarce supply and if they hold vital informa-
tion that management cannot access or properly analyze. Medical monopolies increase the power of clinicians to resist change when supply is restricted.

- In the eyes of the public, it is difficult for managers and boards to bridge the credibility gap between themselves and the clinical professionals. Changes involving clinicians have to be well managed.

- Boards (where they exist), management, and staff may line up with community wishes for increased services and ignore a government budget constraint.

- The performance measurement system should be sufficiently accurate to judge performance. Benchmarking can be a useful tool. Where services are hard to define, cost, and price, holding hospitals accountable for meeting their budgets and service requirements will be problematic.

- Performance commitments between government agencies can be weak unless they are credible and well founded initially and the parties’ incentives are aligned.

- The public may resist changes that seem rational to policymakers, such as closing clinically unsafe services in rural areas and centralizing them at another location. Changes have to be worked through with communities.

- Politicians often have difficulty with detailed changes that are the consequence of their own broader policies and intervene because health is so politically sensitive.

Countries attempting such reforms should also try to balance resources with the obligation to provide services at an aggregate level. Expectations about efficiency gains should be realistic. The financing problems built in at the beginning of New Zealand’s reforms resulted in a series of poorly conceived and managed interventions. These included ad hoc revenue injections to purchasers, equity injections for CHEs, waivers of CHE directors’ exposure to liability, and centrally imposed solutions to contracting deadlocks.
The politics of change must be understood and planned for. New Zealand’s reforms were weak in managing this aspect. Any substantial health sector reform will most likely extend beyond the life of the government that starts it. Securing an accord may be possible across political parties on critical matters such as the government’s role in the health sector and broad directions for the sector. New Zealand seems particularly prone to launching regular structural changes in the health system with the attendant potential damage to capability.

Greater acceptance across the major political parties about what works and what is contentious would engender steadier progress. The Ministry of Health is developing a medium-term sector strategy, but this work is in its infancy. This could provide a backdrop for assessing proposed changes and may improve the quality of decision-making. Effective cooperation between government agencies on policy development could also lift the quality of policymaking activities.

Countries attempting such reforms should also try to link the policy design to implementation realities. Policies should not demand a level of complexity or expertise that cannot be delivered in the time-frames being considered. This happened to New Zealand’s policy of allowing private alternative health care plans to compete with the government’s purchasing authorities. Policies have to recognize what capacity exists, what is required, and what can be achieved.

When possible, policy design and implementation should identify the key sources of influence in the current system and address ways to engage them in change. If this is impossible, ways to manage their dissatisfaction should be identified.

Problems associated with health sector monopolies, natural or otherwise, should be recognized in making changes to health systems. Monopolies can be in the form of government roles in policy-making, purchasing, and provision. They can also exist in the private sector supply side (e.g., some clinical groups are monopolies). Monopolization is usually extensive in health systems, particularly in small countries. The point at which performance would be enhanced by addressing monopolistic situations depends on circumstances in each case. Sometimes the cure can be worse than the disease.Governments should be careful not to make a bad situation worse.
through poorly conceived and implemented regulatory interventions. Contrary to its original intentions, the New Zealand government managed to entrench in the system some of the monopoly characteristics of its own providers and purchasers through successive policy modifications that were prompted by its dissatisfaction with performance.

New Zealand’s experience demonstrates the difficulties of using central requirements and monitoring to steer performance. It also shows the complexity of marrying a model that emphasizes choice or competition to a system where the government takes responsibility for a comprehensive national health service. The internal markets needed to do this are difficult to operate.

If government-owned hospitals are part of a country’s health care model, the government probably has social objectives for them. The extent of their autonomy has to be systematically integrated with requirements that they adhere to government policy. The absence of simple financial discipline can result in the worst of both worlds—financial losses and unresponsiveness to government policies.

There should be sectorwide systems to manage the government’s interests as the hospitals’ owner. Which system is best depends on the details of the situation. New Zealand’s experience suggests that “halfway houses” between rational, disciplined central controls and decentralized systems, backed by strong incentives, can be a source of confusion and performance failure. New Zealand’s experience shows how difficult it is to build the organizations and policy and management frameworks that ensure high performance from independent agencies responsible for multiple and often conflicting goals. This quest must continue, however, if the marriage of central policies and principles with local control and initiative is to succeed. It requires an advanced practice of public management techniques that is likely to be difficult for many developing countries to achieve. For example, contracts between a national purchasing agency and integrated care organizations are technically complex, and their management demands extensive statistical information and risk analysis.

A system where government dominates the roles of the purchaser and provider needs rules on the disclosure of information and proto-
cols for the agencies to work together on critical issues. In this situation, the normal conventions of commercial life regarding confidentiality of information are irrelevant. New Zealand has had problems with purchasers having poor information on services and costs and with CHEs planning their capital and service developments in isolation from purchasers.

The accountability frameworks developed for government-controlled agencies should align internal and external accountabilities. The Heath Funding Authority used a strategic business-planning process to drive planning and management activities. This process underpinned the external and internal accountabilities at every level. It showed great promise as a way to significantly improve the management of public resources.

Finally, the impact of reform in the hospital sector cannot be judged by looking only at the hospitals’ legal, policy, and management frameworks. New Zealand’s story shows that hospital performance was very much affected by the structures and operations of the purchasing function and the influences of the political system. No simple associations can be drawn either about hospital performance and the degree of decentralization or about forms of governance. Only by taking a systemwide view can the agencies’ behaviors, achievements, and failures begin to be understood.

Postscript—September 2002

This chapter was written in 1999. The November 1999 elections resulted in the replacement of the architects of the 1993 reforms, the national government, with a Labour-Alliance coalition. The new government disbanded the health purchaser (Health Funding Authority) and set up district health boards to replace the CHEs. These boards have the joint functions of purchasing and providing services, much as did the area health boards of the 1980s.

This restructuring is the fifth significant restructuring in the health sector in 15 years. New Zealand has gone from elected hospital boards, to 14 elected area health boards, to 4 purchasers and 23 CHEs providing hospital services, to 1 purchaser and 22 CHEs.
New Zealand now has a conglomerate Ministry of Health and 21 district health boards. Some fiscal impacts are emerging with a collective deficit for the district health boards of over NZ$200M being recorded for the 2001/02 year, despite increases in the level of government funding.\textsuperscript{45} While aggregate fiscal impacts can be assessed, there is a lack of comprehensive analytical information on the intended costs and benefits of these latest reforms. Also the analysis of previous reforms has been insufficient in many respects. Most new systems did not have time to develop before the next wave of reform. There is an opportunity now to benchmark what is provided for what cost under the current system and, at least for the CHE inpatient services in the latter years of the existence of the CHEs, what was provided for what cost under the previous system. Consideration could also be given to levels of public and consumer satisfaction and health status indicators for different populations. This work could provide some critical information for New Zealand and other countries in assessing the value of alternative health systems in the future.

Authors’ note: The views expressed are the views of the authors, except where attributed to others. While care has been taken in the preparation of this chapter, the authors are not responsible for the results of any act or omission done or omitted in reliance in whole or in part on this report, nor for any error or omission from the chapter.

Acknowledgments: The authors would like to acknowledge the helpful comments on an earlier draft from Loraine Hawkins and Chris Lovelace of the World Bank and the editorial assistance provided by Loraine Hawkins. Helpful comments were also provided by Kathy Spencer from the Office of the Minister of Health in New Zealand. The authors also wish to thank Mani Maniparathy for assistance with the financial information on Crown Health Enterprises.

Notes


2. Ibid., p. 44. Note that there are problems with comparing health expenditure between countries, and these figures must be used with caution.
3. These are 1999–2000 figures, based on the Health Funding Authority’s Funding Agreement with the government. Note that Crown Health Enterprises was renamed Hospital and Health Services in a 1998 amendment to legislation, but to avoid confusion, we refer only to Crown Health Enterprises. Crown Health Enterprises is a group of companies owned by the state; the government ministers are the shareholders.

4. “The Crown” refers to the state, which exercises its ownership through the government in the form of the “Executive.”

5. Interviews were held with: CHE CEOs (3); a CHE board member (1); former AHB CEOs (2); a former minister of health (1); heads and members of implementation agencies (5), including reform agencies (National Interim Provider Board, Health Reforms Directorate, Communications Unit); taskforce members (2); an academic involved in health sector (1); a director general of health and a former director general of health (2); a senior manager in the former Department of Health (1); Treasury staff (2); former SSC staff involved in the reforms (2); a former CCMAU staff member (1); department of prime minister and cabinet staff and former staff (2); managers of private hospitals and health insurance companies (3); former AHB board members (2); former RHA board members (2); Health Funding Authority board members (2); and consultants involved in the reforms (2). Note: Some people appear in more than one category.


7. Ibid.

8. There were numerous instances of ministers and their ministries influencing purchasing decisions. For example, in the early years, RHAs had to comply with detailed policy guidelines on purchasing. Ministers set aggregate revenue levels for hospital services in the first two years. In 1998, the minister of health issued a plan for hospital services throughout the country.
9. The Otago CHE was planning to provide services for Saudi Arabia but was prevented from proceeding by the government.

10. The ownership interest covers interest in the organization’s viability. It comprises the management of physical and human assets, the robustness of vital systems such as the financial, planning, risk management systems, and return on capital.

11. Between 1994 and 1997, CHE directors were appointed by and reported to the ministers of CHEs and finance. The minister of CHEs was separate from the minister of health, to whom the RHAs reported, reinforcing the purchaser-provider split. From 1997 on, the ministers of health and finance held the power to appoint and control the CHE directors, and the minister of health exercised those powers alone in relation to the Health Funding Authority.


15. Officials involved in the policy development expressed the view that CHE boards were expected to initiate takeovers and mergers. Interviews, July to September 1998.

16. Formal procedures include requirements to demonstrate net gain over 10 years and no danger to the viability of remaining services.

17. The Health and Disability Services Act empowered the RHAs to issue terms and conditions deemed to be accepted by a provider if the provider accepted payment.
18. Separating the service and facility components might have promoted competition for services by permitting groups of providers to access essential facilities, thereby lowering entry barriers.

19. The development of integrated care organizations with capitated budgets might have strengthened incentives to select the best care within financial limits.


21. Ministry of Health, *New Zealand Hospital Sector Performance*, Wellington, 1993, p. 18. Note that consumer price index deflated annual percentage changes in revenue varied from –5.4 percent to 16.2 percent in any one year, while the consumer price index deflated annual average percentage change for the decade was 0.


23. New valuations of CHE fixed assets led to a write-off of NZ$993 million (30 percent of CHE assets). Further adjustments in 1993–94 led to another NZ$457 million write-off, a combined total write-off of 47 percent of AHB asset value at the start of 1992–93. There was also a write-off of NZ$460 million in debt.


27. Ibid., p. 17.

28. An example is the Hutt Valley CHE, which ceased elective surgery for a short period in 1995–96 before being told to resume these services, despite exceeding their contracted volumes.
29. An example of this is the introduction by the minister of health of “exit protocols,” requiring CHEs to provide six month’s exit notice.

30. The CHEs advised the Health Funding Authority in the 1998–99 contract round that they had extensive hidden costs in the form of deferred maintenance and capital development. One CEO estimated this at more than $1 billion for all CHEs. In interviews, views were expressed that investment in staff training and development was insufficient.

31. The 1999 Labour-Alliance Government created district health boards to replace the CHEs and the Health Funding Authority—thereby combining the purchasing and providing roles, similar to the AHBs.


34. Reports reviewed included the Ministry of Health, *Purchasing for Your Health* reports, Wellington, and Deloitte Touche Tohmatsu, “Trends in Area Health Board/CHE Performance.”

35. Provisional figures; audited deficit likely to be NZ$56 million.


37. Further studies could consider output levels achieved related to CHE costs for 1998–99 and subsequent years. The “data envelopment analysis” by the Health Funding Authority and CHEs could provide useful information on service volumes, costs, and efficiency levels. The 1999 Labour-Alliance Government set up a new system of funding based on population characteristics. Tracking relationships between costs and outputs will become increasingly difficult in the future.

for case mix and complexity of treatments. These figures are not equivalent to raw throughput.


41. Ibid.


In 1995, Victoria’s Kennett Government restructured metropolitan health care services, combining 32 independent, publicly owned and operated hospitals in Melbourne into 7 health care networks: 6 regionally based and 1 specialist network. Three legally independent public hospitals operated by the Catholic Church were also incorporated into the networks for planning and funding purposes. Networks changed the way health services were delivered in Melbourne, capital of the state of Victoria and Australia’s second largest city. Acute care hospitals were combined with other acute care hospitals and with non-acute-care providers. Governance arrangements similar to those in commercial organizations were introduced for metropolitan hospitals.

Networks were part of a larger package of changes designed to improve the efficiency and effectiveness of the delivery of government health services. The other institutional changes were specific to health care—in the two years before the creation of networks, the state health budget had been cut significantly and output-based/case-mix funding of inpatient acute services introduced (box 9.1). Other
Box 9.1 The Victorian Health System

Health services in Australia are delivered by both the public and private sectors under complex Commonwealth/state funding arrangements. State governments are responsible for providing public hospital services, mental health programs, home and community care, and health promotion. The Commonwealth government shares funding responsibility for most state services and subsidizes most private general practice and specialist medical and surgical services. Local governments provide some community health services.

By the mid-1990s, metropolitan Melbourne had 35 hospitals, including 6 tertiary acute care (or teaching) hospitals to serve 3 million people. Almost a third of the state’s acute care hospital activity occurred within 5 kilometers of the city center, while services in the growing outer suburbs were under strain. Moving or reconfiguring services had proved very difficult, although during the 1980s a Labor Government had relocated 2 hospitals from the inner city, despite strong resistance. Other changes during the 1980s included moving the delivery of general acute psychiatric services from specialist institutions to general hospitals (“mainstreaming”).

In the early 1990s, two influential reports commissioned by the government concluded that Victoria’s hospitals were much more expensive to operate than their counterparts in New South Wales and Queensland. In 1993–94, the Kennett Government introduced output-based (or case-mix) funding of acute care hospital services and large budget cuts to restore the state’s finances. By 1995–96, Victorian inpatient costs were among the lowest of all states.

changes were either more general (e.g., changes in industrial relations) or occurred at the same time as the creation of the networks (e.g., government commitment to competitive tendering of intermediate services and whole institutions).

The introduction of networks (in conjunction with the other developments) changed health care managers’ incentives. Further, they changed the ability of managers to act on these new incentives. We describe these changes but do not try to evaluate or quantify their effects individually. Because no independent analysis had been done on network introduction and the quantitative data were poor, we relied primarily on documents published by networks and the Department of Human Services (DHS), and on discussions with departmental and network staff, board members, academics, clinicians, and advocacy groups.

An informed, though subjective, perspective on the effect of the changes in publicly delivered health care was obtained through a structured questionnaire, completed by 13 current board members from across the networks who had previously served on hospital boards of management. This survey provided useful, though still anecdotal, information.

Objectives and Timelines of Policy Changes

The Kennett Government set out to restructure Melbourne’s health care services to improve:

- Quality, with closer client focus overall and improved continuity of care
- Efficiency, partly by delivering services in more cost-effective settings
- Accessibility, particularly for people in the middle and outer suburbs of Melbourne

In 1995, an independent Metropolitan Hospitals Planning Board (the “Planning Board”) was created to determine the number and
The existing pattern of hospital locations, functions, and governance is largely a result of historical and political evolution rather than economic rationality. When setting up the Planning Board, the Kennett Government noted:

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Table 9.1 Timeline of Policy Changes

<table>
<thead>
<tr>
<th>DATE</th>
<th>EVENT</th>
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<tbody>
<tr>
<td>October 1992</td>
<td>Kennett Government is elected with large majority in both houses of Parliament.</td>
</tr>
<tr>
<td>May 1993</td>
<td>Victorian Commission of Audit recommends rationalization of hospital services through joint or network arrangements between hospitals wherever it is cost-effective.</td>
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<tr>
<td>June 1993</td>
<td>Case-mix funding is introduced for acute services provided by public hospitals, and real recurrent funding is cut.</td>
</tr>
<tr>
<td>February 1995</td>
<td>Newly formed Planning Board calls for submissions from interested parties.</td>
</tr>
<tr>
<td>April 1995</td>
<td>Planning Board releases <em>Interim Phase 1 Report</em>. Bonus payments are introduced for hospitals meeting specified emergency department targets.</td>
</tr>
<tr>
<td>June 1995</td>
<td>Health Service (Metropolitan Hospitals) Bill enables implementation of Planning Board’s final recommendations passed by State Parliament. Planning Board releases final Phase 1 report, recommending six geographically based and one specialist women’s and children’s network.</td>
</tr>
<tr>
<td>August 1995</td>
<td>Networks are formed by administrative order, aggregating existing hospitals.</td>
</tr>
<tr>
<td>December 1995</td>
<td>Planning Board releases <em>Phase 2 Report</em>.</td>
</tr>
<tr>
<td>July 1996</td>
<td>Government merges two geographically based networks. Decision is made to competitively tender for design, finance, construction, and operation of two new tertiary public hospitals.</td>
</tr>
<tr>
<td>October 1996</td>
<td>Government releases <em>A Healthier Future: A Plan for Metropolitan Health Care Services</em>, outlining a 10-year plan for capital works and proposed hospital closures and reconfiguration of services.</td>
</tr>
<tr>
<td>November 1997</td>
<td>Major tertiary hospital is removed from one network, preparatory to contracting out its reconstruction and operation, and remainder of the network is merged with another network.</td>
</tr>
</tbody>
</table>

than systematic planning. Individual Victorian public hospitals are separate bodies established by ad-hoc and localized initiatives over the years, each governed by a Board of Management.5

Most network operations were concentrated around metropolitan Melbourne. The catchment area for all but one nonspecialist network extended from inner Melbourne (where most of the tertiary/teaching acute hospitals are located) to the outer suburbs (where there are mostly smaller hospitals and other nonacute care institutions). Patients could use any network’s providers. Most rural hospitals remained stand-alone institutions with local boards (aged and acute care institutions were merged in three regional centers).

The DHS remained responsible for meeting the state’s health needs, effectively functioning as a monopoly purchaser of services, with the networks providing a specified quantity of services (or outputs). Each network, though monitored by the DHS, was responsible for its own financial viability.

**Design Issues**

The key design issues discussed below are the governance arrangements, the provider payment systems, the market environment, and the arrangements for community input. While each of these issues is examined in turn, it is clear that each element affected the others.

**Governance Arrangements**

With network introduction (and changes in funding, monitoring, and other arrangements) the new boards were given clearer objectives, more specific performance measures, and minimum targets. These directives were intended to bring a more commercial approach to decisionmaking, similar to changes applied to many Australian public enterprises in the 1980s.

However, boards and their managers were not given a single measurable goal such as maximizing the organization’s long-term wealth. Publicly operated health care providers are inevitably different from corporatized public enterprises, which sell their services commer-
cially, in that health care providers produce mainly “community service obligations.” These obligations require providers to deliver services that could not or would not be offered commercially. Consequently, the networks still faced multiple, potentially conflicting, objectives related to enhancing efficiency, quality, and access.

*The changing role of independent boards.* Victorian hospitals had been incorporated and independently run for more than a century (box 9.2). This system had generally served the community well but had its critics. In an editorial on the release of the Planning Board’s *Interim Phase 1 Report*, *The Age* newspaper noted that the hospitals had become “self-serving and did not adapt well to the changing shape and needs of the city they were supposed to serve . . . more remote from the community they are supposed to serve.”

With network introduction, three key changes in governance arrangements were designed to encourage a more responsive and strategic approach to health care delivery. First, boards had an explicit governance (or oversight) role rather than a managerial role. Second, the expectation that boards would meet agreed budgets was made explicit. Third, board members were selected for their skills and decision-making expertise, rather than primarily to represent different stakeholders.

The explicit oversight role of the network boards was reflected in the differences between the parts of the legislation applying to the metropolitan networks and those applying to other, mainly country, public hospitals. Under the Health Services Act, public hospitals had “Boards of Management” to “oversee and manage the hospital” and to ensure compliance of the hospital’s services with the Act and “the objects of the hospital.”

In contrast, the title of network boards as “Boards of Directors” (the usual title in Australia for a private corporation’s board) was intended to reflect their different role. The related legislative provisions were also intended to bring a more commercial approach to governance, including the first specific requirement to budget for long-term financial viability. This was reflected in the introduction
Box 9.2 The Changing Governance of Public Hospitals in Victoria

Victoria’s first hospitals were set up by the colonial government. They took care of convicts and the military, for whom the government was considered responsible. Free settlers took care of their own health. The government encouraged the creation of charitable institutions for the poor, funded by subscription.

However, hospitals were partially government-subsidized philanthropic enterprises, seeking and receiving land and some financial help from the government. Hospitals also relied on the voluntary labor of honorary medical officers and their students. Hospitals had a major teaching role and, working with the university medical schools and the specialists’ colleges, partly organized hospital inpatient and outpatient services to help junior doctors gain experience.

The hospital boards (or governing committees) and honorary medical officers were elected by contributors, who performed a similar function to shareholders of a private company. In 1864, the state government passed an Act for Hospitals and Charitable Institutions to allow hospitals to incorporate and thus engage in activities in the name of the organization. Until 1988, the regulatory regime for hospitals was part of the broader regime to regulate charities rather than government bodies. Even today, they are legally separate from the government, unlike the Department of Human Services.

Public hospitals have become more closely linked to the government, both financially and institutionally. By the late 1950s, donations accounted for only 2 percent of income, as rising costs led to more government funding. The Hospitals and Charities Act of 1958 enabled the Charities Board to...
recommend amalgamation of subsidized institutions, and the Health Services Act of 1988 made their transition to statutory corporate bodies almost complete, with board appointments subject to the recommendation of the state’s health minister.


of payments for network board members. The 1995 amendments to the Health Services Act of 1988 stated that, instead of managing the network (made up of several campuses of what were previously independent hospitals), the functions of the board of a network were:

(a) to establish the objects of the [network];
(b) to establish the organizational structure of the [network];
(c) to appoint a person to fill a vacancy in the position of chief executive officer;
(d) to appoint senior management in consultation with the chief executive officer;
(e) to oversee the management of the [network] by the chief executive officer;
(f) to develop a business plan for the operation of the [network];
(g) to develop plans, strategies and budgets to ensure the provision of health services by the [network] and the long-term financial viability of the [network];
The Planning Board suggested that, if network boards were to perform these duties, their membership should consist of people with a mix of skills, including finance, law, management, human resource management, and research/academia. “Health care industry (nonstaff representation)” was also sought, but not specifically those with clinical expertise.

The first group of network board members and chief executive officers was selected differently from most of their predecessors on hospital boards, who were often nominated by the existing board or hospital management. From a group identified by using a commercial search contract based on criteria developed by the Planning Board, the government selected and approached candidates about the positions. The act allowed the government complete discretion in the appointments and reappointments.

The Planning Board stressed that the new boards should play a strategic role. From some anecdotal evidence, this occurred. All but one network board member who completed the questionnaire thought board focus on strategic issues had increased, and all believed that focus had increased on alternative care settings and on shifting services to the most appropriate locations. They saw these changes as positive developments.

Clarity about responsibilities. The governance arrangements made the health minister effectively the networks’ sole shareholder (on behalf of government) and their key client (recognizing patients as the ultimate consumers). The minister could direct both network and rural hospital boards, intervening, if necessary, in politically sensitive or strategic matters (e.g., industrial relations). This relationship was reflected in the DHS’s close monitoring of each network’s financial viability.

The Planning Board argued that network creation required a new relationship between providers and the DHS, based on a “clear sep-
aration” of the DHS from hospital management and of the roles of purchaser and provider of health services. “Boards need to be given clearly defined independence for operational and strategic decision,” the Planning Board argued.12

The legislation creating networks gave board members some statutory independence by allowing their removal only if they were mentally or physically incompetent, convicted of a crime, not attending board meetings, or bankrupt. No similar legislative constraints applied to members of the rural and former metropolitan hospital boards (or, as the government noted, to board members of state-owned business corporations).

Most constraints were removed by amendments to the legislation in 1998, with the government arguing: “[A]s a rule acts confer a general power to remove directors or members of boards of public bodies. This is appropriate to ensure adequate accountability by directors to government and the community.”13

The Parliamentary Opposition focused on the effect on board independence, noting that removal powers went beyond merely dismissing a member for poor performance of duties. “[T]he legislation could be used to force [network] boards simply to toe the political line, rather than providing the best service for patients, which is what their jobs are meant to be.”14

Twelve of the network board members surveyed thought that departmental influence over board decisions had been reduced or was unchanged since the creation of networks. Five thought the level of indirect political influence had increased; three thought it had declined. Compared to other hospital reforms, it appears that the Victoria reforms were relatively successful at reducing the politicization of decisions related to hospitals.

Accountabilities were affected by the nature of the Health Service Agreements between networks and departments.15 The agreements did not specify the case mix of services to be provided, but still preclude networks’ reconfiguring their services unilaterally. DHS’s Public Hospitals Policy and Funding Guidelines 1999–2000 stated that funding is to be based on continuance of “the current range of services” and that “the planning implications” of any “significant change
in the range or scope of services . . . must be discussed and agreed with DHS.”\textsuperscript{16}

In addition, the DHS continued to oversee networks’ decisions in two key areas: capital investment and terms and conditions of staff.

• *Capital investment.* The network boards’ latitude for making strategic capital decisions, or even to substitute capital for labor or other inputs, remained somewhat constrained. The prices paid for outputs through annual funding (largely uniform across hospitals) were not intended to cover depreciation or any return on assets.\textsuperscript{17} Instead, separate streams of funding to cover capital costs, and annual capital grants, treated as capital injections, were provided to cover depreciation expenses. To borrow money, networks needed the approval of the health minister and the state treasurer. According to the Inner and Eastern Health Care Network, approval, particularly from the treasurer, was difficult to obtain.\textsuperscript{18}

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

But, as Lin and Duckett noted:

\begin{quote}
[T]he question remains unresolved about the balance between autonomous investment decisions by the hospitals [or networks], either in capital infrastructure or service re-configuration, and the macro resource allocation and planning decisions by government on behalf of the community.\textsuperscript{19}
\end{quote}

• *Staff conditions.* In line with the trend across the Australian economy away from industry-wide bargaining, networks negotiated staff terms and conditions, as the Kennett Government had devolved this responsibility from the DHS to hospitals in 1994. The DHS remained somewhat at arm’s length from the detailed negotiations but
vetted agreements, before signing, for consistency with the Kennett Government’s wages policy and ability to cover any resulting unit cost increases. Some individuals involved with the reforms have argued that the government continued to exert significant implicit pressure over labor negotiations.

Overall, achieving clear accountability between a network board and the DHS posed challenges. Still, 11 of the 13 network board members who responded to the questionnaire considered the role of the board and individual members clearer since the network creation, and 10 thought this development positive.

**Provider Payment System**

DHS funding agreements were with each network, not individual hospitals. The nature of the funding system for health care providers and the role of their boards have been closely related. Each hospital used to negotiate with the DHS, and board members’ political influence was important in the competition for government funding. Walker noted that, historically, the most successful hospitals in this competition “had the best relationship between their committees of management, the government and the charitable trusts.”20 Similarly, Swerissen and Duckett noted, “Traditionally, the basis for public hospital funding from state governments has been obscure: a hospital’s budget reflecting a combination of history, negotiating skill, political influence and luck.”21

However, this began to change in the 1980s, as governments sought to create incentives for improved performance within the funding arrangements.

**Specifying output.** In the mid-1980s, Health Service Agreements with each hospital were introduced, replacing detailed input controls (staffing size and composition determined by the department) with a single global budget and some broadly specified expectations of hospitals. But, as Parliament’s Economic and Budget Review Committee noted: “Health Service Agreements do not provide an explicit link between output and funding. . . . no reward for improving
efficiency . . . no funding mechanism to ensure that [more efficient] organizations . . . are rewarded for that efficiency.\textsuperscript{22}

Overall, the committee found large variations in the costs of similar hospitals and “little tangible evidence to indicate that [hospital service agreements] have tackled the problems of discrepancies in hospital performance . . . [they] have not achieved a significant move from historical patterns of funding.”\textsuperscript{23}

The basis of funding negotiations (and with it the importance of board members’ political influence) changed in 1993 when the Kennett Government introduced a more transparent and objective system of output (or case mix) based on funding. Under this system, acute care inpatients were classified into diagnosis-related groups (DRGs), with standard weights (essentially prices) assigned to each DRG. Hospitals and networks were paid for the number of cases treated in each DRG. This approach was extended to the outpatient services of the network’s major metropolitan hospitals in July 1997.

In April 1995, the DHS introduced waiting-time targets and performance bonuses with the Emergency Services Enhancement Program. A 1999 study reported a sustained reduction in recorded waiting times for emergency treatment and occasions of ambulance bypass of emergency departments since 1995.\textsuperscript{24} The study emphasized the importance of the incentives in the funding mechanisms but did not examine the influence (if any) of network establishment on performance.

Less complex output measures were used for rehabilitation, aged care, and mental health. The development work had led to an accepted means of objectively categorizing the expected cost of each case. Large variations in the actual cost of cases with the same diagnosis frustrated attempts to develop a basis for setting an agreed price. As a result, simple output measures were used, including the number of separations, bed-days, registered clients, and client contacts.

The introduction of case-mix funding for acute care services created strong incentives to contain unit costs and to produce a specified quantity of outputs. The government’s funding formula progressively linked funding directly to output. Funding for acute care services represented about three-quarters of network revenues and,
under the 1999–2000 guidelines, about 95 percent of that was closely related to output.\textsuperscript{25}

*Changes in performance monitoring.* The Planning Board envisaged that the new governance regime would decrease focus on detailed monitoring of inputs and processes and increase focus on outcomes. But, in practice, the DHS kept a close watch on the networks. The Victorian Auditor General’s Office noted:

> [T]he Department actively monitors hospital financial performance through a framework which includes:
> - 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; and
> - regular discussions between the Department and individual hospitals on budget and performance issues.\textsuperscript{26}

Two key questions relate to changed monitoring under the network system: the extent of changes and the causes.

- *Changes.* Was DHS monitoring of providers streamlined or merely changed in form? There seems broad agreement that, since the 1980s, the DHS gradually moved from detailed controls of inputs (while still actively monitoring financial aggregates) to more active monitoring of output performance measures (table 9.2).

- *Causes.* To what extent do changes in the intensity of monitoring reflect factors other than network introduction (e.g., the implementation and refinement of case-mix funding and increased knowledge about measuring performance)? There seems plenty of evidence that other factors were more important.

In addition to increasing efficiency, another important objective of case-mix funding was to develop a system free from centralized bureaucratic control, and thereby promote hospital autonomy.\textsuperscript{27} Moreover, at a national level, there has been a major focus on improving performance information in health, although progress has been slow (as indeed many argue it has been in other countries).
Table 9.2 Acute Health Care Services Access Indicators

<table>
<thead>
<tr>
<th>PERFORMANCE INDICATORS</th>
<th>REPORTING</th>
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<tbody>
<tr>
<td><strong>Elective surgery</strong></td>
<td></td>
</tr>
<tr>
<td>Proportion of Category 1 patients admitted within 30 days</td>
<td>D, AR, M,</td>
</tr>
<tr>
<td>Proportion of Category 2 patients admitted within 90 days</td>
<td>D, AR, M</td>
</tr>
<tr>
<td>Average waiting times for Category 2 patients on the waiting list at year’s end</td>
<td>D, AR, M</td>
</tr>
<tr>
<td>Average waiting times for Category 3 patients on the waiting list at year’s end</td>
<td>D, AR, M</td>
</tr>
<tr>
<td><strong>Emergency Department Performance</strong></td>
<td></td>
</tr>
<tr>
<td>Proportion of patients needing resuscitation receiving immediate attention</td>
<td>D, AR, M, H</td>
</tr>
<tr>
<td>Proportion of emergency patients receiving attention within 10 minutes</td>
<td>D, AR, M, H</td>
</tr>
<tr>
<td>Proportion of urgent patients receiving attention within 30 minutes</td>
<td>D, AR, M, H</td>
</tr>
<tr>
<td>Patients staying in the Emergency Department for more than 12 hours before admission to an inpatient bed (number)</td>
<td>D, AR, M, H</td>
</tr>
<tr>
<td>Ambulance bypass (periods of two hours or less, number of occasions)</td>
<td>D, AR, M, H</td>
</tr>
</tbody>
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D Monthly reporting to the department; AR Reported in network annual reports; M Required under the Medicare agreement on Commonwealth/state funding of health care; H Reported quarterly in Hospital Services Report, Department of Human Services.

a. Category 1 and 2 elective surgery patients are those for whom admission within 30 and 90 days, respectively, is considered clinically desirable. Category 3 patients have a condition that causes minimal pain, dysfunction, or disability, and is unlikely to deteriorate quickly.


The funding arrangements between state and Commonwealth governments also affected monitoring at the hospital level. The Victorian government needed information from hospitals to qualify in 1995–96 for almost AUD$50 million (US$38 million) bonus payments from the Commonwealth. The Victorian government had to demonstrate that it was meeting targets for inpatient activity (based on case mix), outpatient activity, and waiting-time targets for elective surgery and emergency departments. An additional AUD$3.5 million was made available for further data development.28

Quality indicators were still relatively undeveloped, while access indicators included waiting times for elective surgery and emergency...
treatment, by category of patient. The indicators developed focused
on surgery waiting times and emergency care and as such were not
entirely consistent with the Planning Board’s emphasis on increasing
the focus on chronic and other nonacute care.

Work on encouraging a focus on quality has not been confined to
Victoria. The Australian Health Ministers’ Advisory Council Task-
force on Quality in Australian Health Care noted in 1996:

Boards of Directors of health care facilities and their managers
must receive the same kind of encouragement to ensure safe,
high quality care provision as they currently receive to ensure
responsible financial management. If managers are to be ac-
countable for safety and quality there is a reciprocal responsibil-
ity for clinicians to be accountable for efficiency.29

This is a major challenge. Nearly four years after this task force
report, anecdotal evidence suggested that most network boards were
still more comfortable addressing financial and efficiency-through-
put issues than quality of care. The focus of the external monitoring
regime, including broad performance indicators and targets, against
which they are held accountable, may have reinforced this dilemma.

*Rewards and sanctions linked to performance.* Health Service Agreements
between the DHS and networks formalized the agreed annual output
levels and prices, in conjunction with published funding guidelines. In
addition, a complex web of other institutional arrangements also
affects the incentives for networks and independent hospitals to
improve performance. The institutions involved include the legal
system and insurance companies (in cases of medical malpractice),
the media (whose scrutiny is helped by freedom of information leg-
islation), and universities and professional associations (particularly
teaching hospitals).

Views differ about how hard a budget constraint there was for
higher cost networks or independent hospitals under Health Service
Agreements. The constraint was clearly harder under case mix than
it was under block funding, although the government could still pro-
vide assistance through the non-case-mix components of normal funding. In fact, the Kennett Government provided “restructuring packages” for two networks and three rural hospitals, although these packages came at the cost of public disclosure of what the government considered unsatisfactory performance, increased oversight by the DHS in hospital decisions, and possible senior management or board changes. Plans to address the problems were reviewed by external consultants from an international accounting firm before additional grants (essentially an equity injection) or short-term, interest-free loans were provided.

Whether the same performance pressures are faced by publicly run and nongovernmental providers was still debated. Dr. Clive Wellington, chief executive officer of St. Vincent’s, a public tertiary teaching hospital run by the Catholic Church, argued that his non-government hospital had a much harder budget constraint than did network hospitals. It thus had greater incentives to improve financial performance:

We have no choice but to achieve the results. It is much more likely a Government would stand by if we faced closure because it can be argued that a Catholic church hospital must manage themselves, and if they and their board didn’t do it well enough to keep the hospital viable, well then the Government is just going to have to shift services to nearby publicly-run hospitals where closed wards exist.

Eleven of the 13 network board members surveyed considered that, since network introduction, changes in funding arrangements had led to tighter Health Service Agreements. Ten board members considered that tighter agreements had increased pressure on boards to perform and that it was a positive development. Nine of the 13 network board members surveyed also considered that rewards and sanctions in Health Service Agreements had become more powerful since network introduction. Views differed about whether this was good or bad.
Market Environment

In the decade before networks were created, bipartisan support had been growing for the view that the structure of Victoria’s health system could be improved. In 1992, the Victorian Parliament’s Economic and Budget Review Committee noted that:

Health Service Agreements provide a framework for tackling efficiency within hospitals, but not for allocating resources efficiently between hospitals. [The Committee] finds . . . substantial scope for efficiency gains through: hospital amalgamations; hospital closures; hospital use-conversions; and specialisation in health services provided by hospitals.\(^{32}\)

The Planning Board aimed to enhance both the degree of cooperation (largely within networks) and competition (largely between networks) among Melbourne’s health care institutions.

Strategic alliances. The Planning Board considered two approaches to improving integration in service delivery: strategic alliances between independent, publicly run organizations, and amalgamations. It rejected the first option because these affiliations were “unlikely to hold firm when hard decisions must be made about the location or rationalizing of services. Common governance of hospitals is a more effective mechanism to achieve the objective of high quality, patient focussed services and provides greater certainty that these benefits will be attained.”\(^{33}\)

However, the board noted that partnerships that could benefit both parties, as well as the patients served by the institutions, were more relevant when describing the links between the government and nongovernment hospital sectors. These partnerships could be structured as strategic alliances, affiliations, or joint ventures. Such relationships existed between the networks and preexisting denominational hospitals, hospices, and other facilities and were envisaged for the future privately run public hospitals (to be awarded by competitive tender).
The Planning Board’s views on the fragility of alliances were borne out by the breakdown of the relationship between the Inner and Eastern Health Care Network and St. Vincent’s Hospital. After the merger of the Inner (which contained St. Vincent’s) and Eastern (which contained the Alfred Hospital) Health Care Networks, the new entity had two tertiary teaching hospitals. The network’s planning for both hospitals envisaged “some resources will be shifted over time to build up services in the outer east” with explicit targets for an increase in the proportion of services being delivered more than 8 kilometers outside the central business district from 32 to 41 percent. Moving these resources heightened strains in the relationship—St. Vincent’s thought it was being asked to bear an unfair proportion of the burden. When St. Vincent’s and Inner and Eastern found themselves part of two different consortia competing for a major tender, St. Vincent’s sought to end the alliance and deal directly with the DHS for planning purposes.

St. Vincent’s CEO had argued that the fragility of alliances is part of their strength, as they will persist only if all parties continue to benefit from the activity. He thought this explained the continuation of the many cooperative relationships with the various campuses and clinical units within the Inner and Eastern Health Care Network after St. Vincent’s separation from the network.

*Merging acute care providers.* Acute care providers were merged to reduce duplication and help develop more responsive services, partly by greater sharing of clinical and nonclinical services. Each network had several acute care hospitals, typically one tertiary or teaching hospital, and several smaller “community” hospitals.

The Planning Board’s preliminary analysis of hospital cost structures suggested that some small and poorly located community hospitals were not viable as acute care institutions. It was expected the networks would be forced to close or reconfigure a number of these institutions.

In the four years since their establishment, the networks closed nine hospitals and reconfigured the operations of several more, but there are no published estimates of any cost savings from these
changes. However, the Inner and Eastern Health Care Network estimated that it could produce twice as many inpatient services as it was currently delivering at Burwood and District Hospital with the same funds by closing this institution and moving the activity to the nearby Box Hill Hospital. In addition, surplus assets were sold, and the proceeds retained by networks to allow them to deliver more services within their existing budgets.

Neither the legislation nor the DHS prescribed how each network should capture the benefits of merging acute care providers, and different networks have adopted different approaches. The Southern Health Care Network developed networkwide clinical programs. Inner and Eastern developed more along campus-based lines, but organized some cooperative activity such as quality-improvement initiatives (box 9.3). The Western Health Care Network implemented networkwide clinical programs but, after merging with North Eastern, introduced more campus-based clinical management structures.

The Planning Board saw merging services as a way to raise both efficiency and quality. It cited work from the United States that suggested that higher volumes at each site led to better outcomes for some procedures. The introduction of network boards was seen as more likely to reduce the barriers to mergers or reconfiguration and thus lead to improvements in quality through specialization and increased volume.

Case-mix funding, with its extra pressure to constrain unit costs, created strong incentives to consolidate multiple sites within a network to capture economies of scale. However, because case mix directly funded outputs rather than outcomes, there were no financial incentives to consolidate sites if higher volume improved quality of care instead of reducing unit cost.

Merging acute and nonacute providers. The Planning Board envisaged that, ideally, each network would deliver acute, aged, psychiatric, palliative, rehabilitative, and home-based services.

Mainstreaming specialist (particularly psychiatric) services with more general services and integrating acute inpatient care with non-acute community services commenced in the late 1980s and early
Box 9.3  Introducing Service Quality Improvements in a Network Environment

The Planning Board proposed that each network establish a quality assurance subcommittee of the board. The roles of these boards have included analyzing performance information and overseeing the implementation of improvement strategies.

Some quality improvement activities may be easier to establish when campuses are part of a network, rather than stand-alone institutions. Claimed benefits include:

- Improved ability to develop and share performance information by facilitating agreement on common data standards and disclosure
- Increased incentives and ability to share insights across campuses
- Increased efficiency in resource use through joint development of better information and improvement approaches
- Enhanced incentives to share knowledge about how to undertake quality accreditation through mentoring programs or exchanging documentation
- Expanded scope to reduce quality lapses resulting from lack of coordination between different modes of care.

However, it is possible networks’ more centralized or standardized approaches may have inhibited tailoring quality improvement strategies to the needs of particular sites and inhibit experimentation with different approaches.

Sources: J. Wilkinson, Board Member, Inner and Eastern Health Care Network (IEHCN), Melbourne, personal communication, August 16, 1999; G. Ryan, chief of clinical services, IEHCN, Melbourne, personal communication, August 26, 1999.
1990s, predating networks. This process had general support among providers, but the possible diversion of resources to acute care services or to a more medical than social work approach caused some concern.38 The establishment of Victoria’s networks continued the mainstreaming and integration of services.

In its Interim Phase 1 Report, the Planning Board recommended integrating extended care providers (aged and palliative care services) within the hospital networks (table 9.3). As a result, some smaller acute care hospitals (not considered viable as general hospitals) were reconfigured as specialist aged or palliative care institutions within networks.

Network management may be more supportive of non-hospital-based care (or service substitution) than hospital-based management. Asked by the Victorian Auditor General’s Office whether network hospitals could achieve further efficiency savings through service substitution, four of the six network chief executives (but less than half of hospital chief executives) said they could.39 This response seems consistent with the hope that networks would focus less on particular sites and more on services.

Initiatives to improve continuity of care have included encouraging better discharge planning and strengthened links between the network’s campuses and general practitioners in the community.

A number of people interviewed for this study said that improving the efficiency and quality of acute care had been a higher priority for the Kennett Government and networks than improving links between services in the short term. This concern was reflected in attention to issues such as the design of funding mechanisms and changes in the delivery of services. However, respondents thought the difficult task of improving links was receiving more attention than in the past. Twelve of the 13 board members surveyed considered that, since network introduction, focus had sharpened on care settings other than hospital inpatient care, changing the care mix away from acute, and shifting services to the most appropriate locations.

Market exposure. Victoria’s government-controlled hospitals have traditionally competed among themselves and with some denominational hospitals for funding to provide services to public patients.
Much of this competition occurred in the political domain. They also competed with denominational and for-profit private hospitals for privately insured and self-funded patients. Private hospitals could not generally compete to provide government-funded services to public patients.

Postnetwork competition increased in four ways: between networks for market share; through the use of tendering for the allocation of clinical services statewide and cross-networks; through increased use of competitive tendering within networks, and through the use of tendering for the operation of public hospitals.

- **Between networks for market share.** Competition for market share had been largely limited to some funding for output growth. Networks lacked strong incentives to compete for public patients (who have some choice of hospital), as funding did not follow individual patients and most networks covered a specific geographical area. Under the case mix–based funding arrangements, the DHS allocated funding to each network for a specified number of acute care inpa-

| **Table 9.3 Merging Acute with Extended Care Providers** |
|---------------------------------|---------------------------------|
| ADVANTAGES                      | DISADVANTAGES                   |
| • Potential for integrating acute and postacute services | • Loss of focus on subacute and nonacute care programs |
| • Improved care of the aged in both acute care hospitals and extended care centers | • Possible increase in operating costs and reduced patient access to the collocated services since most patients are disabled |
| • Potential for collocating services and reduced future capital investment | • Loss of autonomy and service identity within the community |
| • Shared expertise | • Weakened links with the community |
| • Streamlined discharge planning and transitions to rehabilitation | • Increased costs as expensive practices associated with acute care hospitals spill over into aged care programs |
| | • Possible diversion of funds intended for aged care programs to support acute care programs |
| | • Diseconomies of scale |
| | • Potential for increased distance between senior management and the communities they serve |
| • Reduced duplication, shared infrastructure costs, and economies of scale | • Improved access to technology |
| • Improved access to technology | • Loss of focus on subacute and nonacute care programs |

*Source: MHPB, Developing Melbourne’s Hospital Network: Interim Phase 1 Report, Melbourne, April 1995, p. 54.*
patients (adjusted for complexity). Networks could compete to fund additional output (only about 2 percent of the state total). Those that do not reach their funded output faced the prospect of reduced funding that year and lower allocations the next year.

In the absence of strong direct competition for market share, the DHS used yardstick competition to boost performance, mainly monthly comparisons of networks’ performance against a standard set of financial and performance indicators (table 9.1).40

In addition, networks had to publish a standard set of performance data in their annual reports, and the DHS published comparative data.41 The media, academics, or community groups have given little scrutiny to annual report data, despite wide reporting of the waiting time for elective surgery and emergency department services published by the DHS.

- **Tendering statewide and cross-network clinical services.** Networks bid to deliver some new and restructured statewide and cross-network clinical services. For example, contracts to deliver statewide services for infectious diseases and HIV/AIDS were awarded in March 1996 to what were then the Western Health Care Network and the Eastern Health Care Network (the Alfred Hospital).42 St. Vincent’s won the contract for lithotripsy services in one region.43 Other services the Planning Board had envisaged as being awarded by competitive tender were instead allocated by expert review, which arguably decreased the level of competition and increased the degree of politicization of decisions.

Competitive tendering for the allocation of cross-network and statewide services was used less than the Planning Board envisaged. The number of providers who could also furnish necessary related services can be small (e.g., for major trauma). Also, in some cases, a convenient location was important for the main client group (e.g., for HIV/AIDS, in the part of Melbourne where many gay men live). Groups representing some patients (notably, AIDS/HIV patients) have also argued that moving services at the end of a fixed contract would adversely affect the quality of care, where a collaborative relationship with providers was vital.44
• **Competitive tendering within networks.** Within-network competition was driven partly by the Kennett Government's implementation of competitive neutrality under Australia's national competition policy and partly by budget pressures. Competition policy aimed to facilitate “fair” competition between private and public providers of final goods and intermediate inputs.

The Kennett Government identified some business activities within hospitals that could be provided privately and that consequently had to undergo internal review and appropriate internal costing. These services included nonclinical services such as car parks, computing, laundry services, engineering, cleaning, and catering, and such clinical services as medical imaging, pathology, pharmacy, allied health services, and general practitioner services. Networks could choose to open other services to competitive tendering. Some services have been extensively tendered—37 percent of cleaning and catering in the larger hospitals have been contracted out. The cost savings from outsourcing are undoubtedly one of the major achievements of the reforms.

Network managers, one step further removed from direct service delivery, may have been more enthusiastic than hospital managers about competitive tendering. Almost every network board member surveyed considered that, since networks were established, board interest had increased in competitive tendering of both clinical and nonclinical services, although this may just have reflected increasing cost pressures. Most board members thought that heightened interest in competitive tendering of services was a positive development.

• **Tendering public hospital operation.** The Kennett Government was moving toward a mixed system, where corporatized networks coexist with competitively tendered and privately built and operated public hospitals in the metropolitan area. After first tendering for financing, construction, and operation of two rural hospitals, the Kennett Government began a process of competitive tenders for two more complicated tertiary teaching hospitals in the metropolitan area and one less complex outer suburban hospital.
Community Input

The move to networks reduced the number of people involved in hospitals at board level. Before network introduction, the 32 non-denominational public hospitals each had 12 or more board members (about 400 people, allowing for those on more than one board). Afterward there were seven network boards of directors, each with no more than 9 members.

The community representatives on the earlier hospital boards were sources of information about community views and preferences. They also served as spokespersons when seeking donations and volunteers from the community, links to philanthropic organizations, advocates when seeking political support, and sources of advice to hospital management on business issues.

The Planning Board focused on the first two roles, noting the importance of maintaining the sense of community ownership of services. It received submissions on the importance of community input into service development and suggested that individual campuses retain local advisory boards and nurture hospital auxiliaries (box 9.4). The board also argued for the retention of individual hospital identities, each with its community of interest and local affiliations.

The legislation that created networks required each to set up an advisory committee of community representatives nominated by the board. The Health Issues Centre maintained that this had not been a satisfactory substitute for board representation because of “the absence of any legislative timeframes for the establishment of these committees, guidelines for their terms of reference and membership, or any arrangements for monitoring/reporting to government on the extent to which the recommendations of such committees are accepted by the Networks.”

The Inner and Eastern and Peninsula networks set up network advisory committees. However, the representatives of four patient advocacy groups contacted for this study considered the network superstructure irrelevant to most consumers whose contact is with individual hospitals or services. This is reflected in the strategy of networks such as North Western Health Care:
Each hospital and program area within the Network is responsible for understanding the needs of the community it serves and maintaining and developing working relationships with health service providers in their local area. Local responsibility recognizes the differences that exist between the communities who use our services. The Network catchment spans 11 local government areas and the needs and preferences of the communities change within these areas. The best way to ensure that the services meet the needs of these communities is to allow the development of local strategies by the staff closest to the particular community.\textsuperscript{48}

Similarly, the Inner and Eastern Health Care Network considered its advisory committee only one conduit for community input, the main ones being feedback received by individual hospitals or clinical services.

The responsiveness of clinicians and managers to consumers’ concerns varied across networks and campuses. Some advocacy groups suggest the Alfred Hospital became more responsive, partly due to its experience after assuming responsibility for HIV/AIDS patients, an exceptionally articulate and motivated consumer group.\textsuperscript{49}

Developing satisfactory consultation mechanisms nonetheless remains a challenge. On the Alfred’s HIV Care Committee, the hospital’s main liaison group with its HIV patient representatives, the external evaluation of the HIV/AIDS service noted that effectiveness ratings vary from “an effective vehicle for the voicing of concerns and lobbying for action” to “slow to respond to change, with a tendency to focus on day-to-day issues rather than servicewide or strategic issues.”\textsuperscript{50}

A related issue is the level of community in-kind and financial support for health care services. When the networks were created, the parliamentary opposition argued the changes had the potential to “destroy a lot of [beneficial] community input and enthusiastic, competitive fundraising.”\textsuperscript{51}

Board members held divergent views on whether board-level attention to fundraising issues had increased or decreased, and whether any such change had been positive or negative. But the way community
Box 9.4 Equity Issues Faced by Network Boards

DHS funded a nongovernmental organization, the Health Issues Centre, a community advocacy group, to coordinate a submission to inform the Planning Board on issues associated with consumer and community consultation. They organized a forum where Dr. Joanne Wilkinson, a health care academic and network board member, noted:

Network Boards would have to deal with questions of equity in determining who is most worthy of receiving services. In an environment of financial restraint, Network Boards would have to make choices about the relative merits of:

- Powerful and loud lobby groups
- The unemployed or severely disabled, dependent and disenfranchised, the elderly, or the young
- Those who require many and expensive tertiary services or those who would benefit from less costly continuing supportive care/health promotion and maintenance
- Those who are close and more visible or those who are at some distance from the provider agencies, as in the case of statewide services or existing usage patterns where some organizations agree to provide specialist services to those outside their immediate region
- Those of the dominant culture or those with cultural difference.a

The Health Issues Centre has noted the challenge of representing the diverse and competing needs of various groups served by large and complex health care institutions. It did not support “the appointment of representatives linked to only single-issue groups but rather the appointment of well informed and committed advocates of health care consumers with all their interests” on network community advisory committees.b

b. Ibid., Appendix D, p. 3.
views are incorporated into decisionmaking had clearly changed. Ten of the 13 network board members surveyed considered that lobby groups now have less influence over board decisions than in the past; the other 3 thought it was unchanged. Overall, there seems little evidence that the move away from an explicit community representative role for boards has hindered the development of new and more focused ways to gain community input at the individual hospital level.

Implementation

Network introduction followed other changes introduced early in the Kennett Government’s term, including budget cuts and changes in funding arrangements. It also built on changes implemented by previous governments that clarified the relationship between the DHS and independent hospitals. These other developments—for example, comparative reporting for hospitals, based on case mix and Health Service Agreements that more clearly specified hospitals’ objectives and relaxed input controls—were important precursors to the changes of the 1990s.

Context

In the two years before networks were established, the Kennett Government marshaled evidence that the Victorian health system needed fundamental changes. These efforts were critical in developing popular and political support for the hospital reforms. The Kennett Government had gone into the previous election with a policy to introduce area health authorities. These bodies would have had responsibility (thus a service-purchasing role) for hospital and other state government–provided services for a defined population. The 1993 Victorian Commission of Audit provided a comparative analysis, suggesting that Victorian hospitals could be much more cost-effective, but cast doubt on the efficacy of a new layer of purchasing authorities. Noting its concerns about the “complexity of any massive organizational change of this kind,” the commission suggested
that “it may be appropriate to trial one or two [area health authorities] for the whole state before embedding an extensive new statewide area health management structure.” However, the Commission of Audit supported network arrangements between hospitals to capture economies of scale in functions such as engineering, catering, pathology, computer services, and finance.

**Process**

Economic issues of economies of scale and scope played a major role in the design of networks, particularly the number of networks, their composition, and the choice of clinical services to be delivered statewide from only a few locations. Further, the calculations were aimed at establishing scope for competition in the Melbourne hospital market. However, the political economy of this sector also heavily influenced the design and the institutional structures. One participant in the change process described the initial challenge as “turning clay into putty” so that the capital could be better used by reconfiguring existing sites and closing sites, where network boards considered it necessary.

**Sequencing.** As described in table 9.1, the newly elected Kennett Government initiated a sequence of key changes within the health sector:

- Budget cuts were imposed and case mix–based funding was introduced.
- The creation of networks was announced, the combinations of providers to be decided by the Planning Board.
- A capital works program was announced, including publicly financed and built projects, and competitive tendering of construction, financing, and operation of five new acute care hospitals.

Sequencing can have a major effect on the outcome of major change. At two levels, it is relevant to network introduction:

- The changes in the level and structure of funding occurred before, and separately from, network introduction.
Before recommending any specific grouping, the Planning Board built in-principle support for the concept of networks and the need to close some institutions.

The budget cuts of 10 percent over the two-year period 1993–94 and 1994–95 (on top of a 4 percent cut in 1992–93) preceded the move to networks. Coinciding with budget cuts, the introduction of case-mix funding had wide-ranging repercussions on the hospital system. This system of funding highlighted the less economically viable institutions and increased acceptance of a need to reconsider the structure of services across sites. Performance data on a case-mix basis had been introduced several years before but without any link to recurrent funding.

Major resistance was expected to any specific grouping of hospitals and the closure of any institutions. After receiving the board’s Interim Phase 1 Report, the Kennett Government introduced and passed legislation necessary to implement the specific recommendations on hospital groupings contained in the final Phase 1 report. The interim report was released for public comment with options for the key recommendations. This meant that the legislative instruments were in place before the government received the final report. The final recommendations could be implemented without additional legislation.

The main opponents to the proposal to merge the management of acute care institutions were the medical and nonmedical staff and the existing boards. The Kennett Government announced that the Planning Board’s role was to determine the number and composition of the networks, not whether they should be created. This approach forced the opponents to decide whether to devote their energy to achieving the best combination of providers, and thereby reduce the likelihood of closure, or to focus on opposing any change.

The Planning Board was not specifically asked to make recommendations on hospital closures. It suggested some hospitals should be downgraded as services were moved to the outer suburbs. However, it judged that the final decision on the future of individual sites was better made by incoming network boards in consultation with government.
Speed of change. The administrative process of aggregating existing institutions happened fast. The amendments to the Health Services Act that enabled the mergers to occur also prevented review of the merger decisions by the Supreme Court (the highest state court). This ensured that, once the Kennett Government announced which combinations of institutions would be merged, the interest groups that had been consulted in the process could not frustrate its decisions.54

The Kennett Government’s resolve in other politically charged areas of policy outside health may have affected resistance to network creation. Two years before setting up hospital networks, the government had merged local governments and closed a number of small urban schools in the face of fierce organized resistance. Indeed, in opposing the bill to create hospital networks, the parliamentary Opposition described the changes as applying “the principles of local government amalgamation to our health care system.”55

The government went for a “big-bang” approach to the changes, simultaneously abolishing all the metropolitan hospital boards and establishing the networks. In contrast, the parliamentary Opposition advocated implementation “on a trial basis: done in one region first, monitored, assessed and, if proved to be successful, applied more generally” but accepted some advantages in what it saw as similar to a regional health board model.56

The Kennett Government already had experience with rapid policy implementation with the introduction of case-mix funding. Both political sides supported the introduction of this funding tool, but the previous government had intended to phase it in gradually over several years. Almost immediately, the incoming government introduced case-mix funding and, although it was refined over time, did not experience major implementation problems.

In contrast, the Kennett Government used phased implementation in other areas of health, particularly with the introduction of competitive tendering and contracting of public hospitals. It first tendered less complex and smaller rural institutions, drawing on some of the expertise developed tendering prison construction, financing, and operation. The officials involved then moved on to tendering more complex metropolitan tertiary hospitals.
Transparency. The Planning Board’s public processes elicited about 400 responses from various interested parties (compared with about 100 received during the consultation phase before the introduction of case-mix funding).\textsuperscript{57}

The use of a public process and an independent board to develop options may have facilitated some acceptance of the changes. For example, The Age newspaper, which had often been critical of the Kennett Government on health issues, was convinced the changes were appropriate: “a long-overdue attempt to bring Victoria’s hospital system under control and up to date.”\textsuperscript{58}

Preliminary Assessment

Networks were created with three key objectives: to improve efficiency, quality, and accessibility.\textsuperscript{59} Lack of available performance information and the number of confounding factors make it difficult to assess pre- and postnetwork performance changes, let alone attribute change to specific factors. The Planning Board’s recommended independent evaluation of the networks after three years did not occur.\textsuperscript{60} When the Kennett Government announced the metropolitan health care services plan in October 1996, it foreshadowed the fact that it and the networks would evaluate implementation within five years.\textsuperscript{61}

The 20-odd network board members who had previously served on hospital management boards were able to make before-and-after comparisons, although these are subjective. The responses of 13 of these people to the structured questionnaire provided some insights into the changes.

Efficiency

Unit costs have declined since networks were introduced. Real unit costs per case mix–adjusted inpatient in the network hospitals fell about 5 percent in the two years after the introduction of the networks.\textsuperscript{62} The dispersion of costs across networks appeared to have grown. The average unit costs of the highest-cost network were an
estimated 7 percent higher than those of the lowest-cost network (compared with 5 percent in the last prenetwork year).

Lower costs could have been due to technical change rather than network introduction or case-mix funding. Comparisons of costs across the Australian states and territories provide some control (each had access to similar new technology). In the last prenetwork year, Victoria’s reported unit costs were 7 percent higher than South Australia’s, the lowest-cost jurisdiction. In the next three years, Victoria had the lowest reported unit costs. Data for 1998–99 are not yet available. However, these data are subject to caveats, in part because of differences across jurisdictions in how services are structured. The Victorian data cover nonmetropolitan and nonnetwork hospitals.

Observers such as Davidson suggested that networks represent an extra layer of overheads rather than a source of efficiency, and the policy of the then–Opposition Labor Party at the September 1999 state election was to abolish networks as a cost-saving measure. However, the rationale for networks was that certain activities cost less or achieve better outcomes at network level—either substituted for activities that could be centralized in the DHS such as finance functions, planning, and some monitoring, or devolved as shared services at the hospital level. The claim that networks add an unnecessary layer is difficult to assess in the absence of a detailed cost-benefit study.

Most observers interviewed for this study said that the postnetwork reconfiguration of services, and any resulting cost savings, could not have been achieved as readily with the site-based boards. They argued that having provider networks made commitments to retain access to services more credible, and the ability to move staff within the organization eased the changes.

A few observers disagreed because the acute care hospitals that were closed or reconfigured to nonacute care roles were all smaller, less powerful institutions. They said grouping into networks did not result in closure or downgrading of any tertiary teaching hospitals. Although the Planning Board earmarked the Royal Melbourne and Alfred Hospitals for reduced roles as resources were moved to the
outer suburbs, the Kennett Government subsequently allocated to them new acute care services (trauma and HIV/AIDS).

The behavior of denominational and for-profit hospital operators suggests that merging stand-alone institutions or sharing services may confer some benefits. The Sisters of Charity have developed a regional structure and have also formed a joint venture with the Sisters of Mercy to bring together their respective private hospitals, although their motivation appears to be enhancing their ability to attract new business as much as cutting costs. In the 1990s, for-profit hospitals have merged into large groups, at the expense of independent, stand-alone, for-profit hospitals, but how much is driven by cost saving is difficult to determine.

Most network board members who had previously served on hospital management boards thought that network introduction and case-mix funding contributed significantly to efficiency improvements, whereas competitive tendering and industrial relations changes had not had a major impact. Factors that may have improved efficiency include the movement of some services between campuses and closure of some smaller campuses. Other observers have argued that case-mix funding, and subsequent reductions in unit prices, have been more important than networks in driving efficiency gains.

Some anecdotal evidence suggests that more rigorous rationing decisions are now being made at the point of admission. However, this seems to have occurred largely because demand growth exceeded funded supply.

Quality

How much the quality of care changed during the 1990s is unclear—and less clear, the cause. The Victorian Auditor General’s Office’s performance audit of case-mix implementation concluded that the quality of care had suffered from the introduction of case mix and from funding cuts. However, the DHS vigorously disputed this conclusion on the grounds that the analysis was based almost entirely on a questionnaire of managers, clinicians, nurses, and allied health professionals instead of objective measures of a decline in care. Any contribution from network introduction was not analyzed.
It is possible that lower costs were achieved through quality reductions instead of through real efficiency increases. Some quality initiatives were undertaken at network level, although the approach differed across networks (box 9.3). However, data for assessing the network effect on quality are scarce. One possible service-quality indicator, the proportion of separations resulting in unplanned readmission to hospital, is an imperfect measure, in part because of imprecise definitions. Based on aggregated departmental data for all networks, this does not seem to have changed since the introduction of networks (or since the budget cuts and introduction of case-mix funding in 1993–94). Published data from the Inner and Eastern Health Care Network show a decline from 6.45 percent of separations in 1995 to 2.86 percent in 1999. Data for other networks are not published.

Another possible quality indicator is the number of hospitals accredited by the Australian Council on Health Standards. Since networks were created, more hospitals have been accredited. However, the Kennett Government gave all hospitals incentives to obtain accreditation and was moving toward mandatory accreditation for all public acute care hospitals.

Most of the network board members surveyed considered that network introduction and technological change have both contributed significantly to quality improvements, but that unit price reductions have adversely affected quality. Views differed about whether boards are giving issues of quality improvement more or less scrutiny. However, one board member noted that the boards of stand-alone hospitals sometimes get involved in analyzing specific problems, but he doubted that this was the best way to address broader quality issues.

**Accessibility**

Postnetwork accessibility, in terms of geographic access to services and timeliness, may have improved in some areas, although again it is difficult to assess how much to attribute to the establishment of networks and how much to policy and funding decisions that could
have been implemented without networks. The Planning Board envisaged that improved access to services in the middle and outer suburbs would be achieved by moving services and establishing “hub-and-spoke” services for specialist care such as eye treatments, palliative care, and renal and cancer services.

Most questionnaire respondents considered that network introduction, capital injections for new capital works, and technical change contributed significantly to accessibility improvements. Central specialist hub sites, supporting accessible spoke sites, were developed for some eye, ear, cancer, renal, and obstetric treatments, and more patients were being treated at outer suburban sites. Some delays have been associated with the establishment of some new sites, particularly the competitive tendered hospitals, but most delays occurred at the departmental level.

Data on timely access are difficult to interpret. The number of “semiurgent” cases, whose wait for elective surgery in public hospitals exceeded the “ideal” (90 days), declined after network introduction, but increased subsequently. In the early 1990s, many “urgent” cases had to wait more than 30 days, but the recorded number of longer waiting times had already been reduced to nearly zero before network introduction. More than four years later, Victorian hospitals were treating nearly 40,000 more patients per quarter (a 20 percent increase)—at lower unit costs after adjusting for case mix. However, output and funding have not kept up with demand, and total waiting lists increased by 5,200 (20 percent) to about 34,000 in the September 1999 quarter. This reflected more the level of output purchased by the DHS than individual network performance.

Conclusions

According to some commentators, most policy changes in the health sector are incremental because of complex interactions within the health system, powerful interests, and the need for caution because of the potentially damaging implications of inappropriate policies.
Network introduction built on earlier gradual development of more specific arrangements with quasi-independent institutions. It complemented fundamental changes in the funding arrangements that encouraged a greater focus on outputs and a more systematic approach to improving Victoria’s hospital system.

Four broad observations emerge from this case study:

- Victoria has adopted a multipronged approach to improving the efficiency and effectiveness of the health care system, and the separate contribution of any one element cannot be assessed.

- A single independent board responsible for several sites (and at arms’ length from the party political process) may be more effective in closing sites and reconfiguring services than either a central department or boards responsible for each site. The political economy of health reform presents many challenges, and the design of institutional structures needs to consider these issues as well as considerations such as economies of scope or scale and the potential for competition. The networks rapidly closed or reconfigured individual institutions without major disruption of services or public outcry.

- Output- (or outcome-) based funding arrangements and effective performance monitoring underpin arms’-length relationships and improved corporate governance. The introduction of case-mix funding for acute inpatient care and emergency department services strengthened incentives for hospitals to find ways of delivering services better, including site closures and service reconfiguration, among many other strategies.

- Community representation on management boards is only one means of creating incentives for providers to focus on consumer needs. Identifying individuals who can adequately represent the disparate needs of consumers using large service providers can be difficult. Engaging the community in an advisory capacity at the point of delivery might be more beneficial.
Questions remain about the robustness and stability of changes of this kind, including the extent to which results depend on nonstructural factors, such as the qualities of the individuals appointed to boards and the willingness of governments to remain at arms’ length. The answers to these questions will become apparent only over time, but ongoing institutional changes, including those introduced by a new government in early 2000 (which were largely refinements of the network model), complicate the picture. However, analysis of the experience with similar reforms to the governance of other government activities may suggest some answers.

Notes

1. Public hospitals provide free treatment and accommodation to eligible admitted patients who elect to be treated as public patients. They also provide free services to nonadmitted patients and may provide (and charge for) treatment and accommodation services to private patients. They can be run by governments, not-for-profit entities, and, more recently, for-profit organizations. Steering Committee for the Review of Commonwealth/State Service Provision, Report on Government Services 1999, Canberra, www.pc.gov.au/service/gspindex.html (accessed 2 August 1999).

2. The number and composition of networks changed over time; four networks were merged into two and one tertiary hospital was removed from a network to form an additional network in preparation for being competitively tendered. There was a change of government after this case study was prepared. The new government is reviewing the role of networks, with a view to increasing community participation and having more, but smaller, networks.

3. Twenty-one people who had served on the boards of both networks and hospitals were identified. Sixteen individuals could be contacted and 13 agreed to participate.


8. Networks are called “metropolitan hospitals” in the Health Services Act of 1988. The functions of the board are outlined in Section 40D.


10. Five of the initial seven network chief executive officers were from Victorian hospitals.


12. MHPB, *Phase 1 Report*, p. 73.


15. Service agreements are not legally binding contracts, partly because networks, as public statutory bodies, have limited ability to decline or negotiate terms. Inner and Eastern Health Care Network (IEHCN), *Response to the Health Services Policy Review Discussion Paper*, East Melbourne, 1999.


17. The Victorian Government introduced a capital user charge for 1998–99 to encourage improved resource allocation, but this charge was not imposed on networks or other health care providers.


23. Parliament’s Economic and Budget Review Committee, *Efficiency and Effectiveness of Health Service Agreements*, p. 11.


33. Ibid.


40. Yardstick competition is particularly helpful in cases where it is difficult to get sufficient competition going in the market, as is common with hospitals.

41. See, for example, DHS, *Hospital Services Report: December 1999*.


52. It is interesting to contrast the Victoria and New Zealand reforms on this score. The New Zealand public never seemed to have
been convinced of a need for serious hospital reforms—a fact that made implementation even more challenging than it would have been otherwise.


60. MHPB, *Phase 2 Report*, p. 5.


64. See, for example, K. Davidson, “Why Our Public Hospitals Are So Sick,” *The Age* newspaper, September 6, 1999, p. 17.


67. Timeliness of treatment for elective surgery, which, in some respects, is a dimension of quality, is considered under accessibility.

68. IEHCN, *Progress to Date*, East Melbourne, August 1999.


70. IEHCN, *Progress to Date*, East Melbourne, August 1999.

In 1991, Hong Kong transformed its public hospital network into a single, statutory, nonprofit public corporation, the Hospital Authority (HA). The newly created authority became an autonomous funding and management agency for both government-owned and nonprofit hospitals. The reform resembled the other programs described in this volume, in that the HA received many important decision rights previously held by the government bureaucracy. In contrast to the other reforms, however, Hong Kong did not decentralize control. Rather, the creation of the HA changed the nature of the centralized control, transforming it to resemble somewhat the corporate headquarters for the hospital network. Despite the HA’s resemblance to a corporate structure, the relations between the government and the public hospital network remained essentially administrative in nature.

The nature of the mechanisms for accountability for the HA and the resulting incentives continued to rely on the assessment of government officials. Direct public funding continued to provide the lion’s share of the budget, and was not tied to actual delivery of services. Hence, incentives for performance of the HA were not connected to market exposure.
Health status in Hong Kong compares well with other advanced economies, despite lower health spending. In 1996–97, Hong Kong spent less than 5 percent of its gross domestic product (GDP) on health, US$1,200 per capita (table 10.1). Health care is financed through a combination of public (54 percent) and private (46 percent) sources. Public health expenditures are financed from general tax revenues, and most private health expenditures are financed through out-of-pocket household expenditures. Privately purchased health insurance and employer-provided medical benefits pay for the rest.

**The Hospital Sector before Reforms**

In the mid-1980s, hospital care was provided by 44 hospitals with a total of 24,600 hospital beds, most of them in the public sector. This translated into 4.5 beds per 1,000 inhabitants. Prereform, three types of health care facilities provided inpatient care: government hospitals (46 percent of all beds), nonprofit hospitals (43 percent), and private hospitals (11 percent).¹

**Government Hospitals**

In the mid-1980s, the government operated 13 hospitals, ranging in size from 15 beds to more than 1,900, and numerous small health centers, usually with fewer than 25 beds. Most of these facilities were

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### Table 10.1 Health Expenditures in 1986–87 and 1996–97 (total health expenditures, millions of U.S. dollars)

<table>
<thead>
<tr>
<th>EXPENDITURE</th>
<th>1986–87</th>
<th>1996–97</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total health expenditures</td>
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<td>Public</td>
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<td>4,029.1</td>
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<td>Private</td>
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<td>3,469.2</td>
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<tr>
<td>Total health expenditure as percentage of GDP</td>
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<td>4.6</td>
</tr>
<tr>
<td>Total health expenditure per capita</td>
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<td>1,188.1</td>
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general hospitals. Hospital beds were classified as beds in general wards and beds in a small percentage of private wards. Patients in general wards had no choice of physician. Treatment costs were charged at a flat daily rate, subsidized at around 97 percent of treatment costs. Patients in private wards were either university doctors’ private patients (who paid between 100 percent and 150 percent of actual costs) or civil servants (who paid a reduced rate).

Nonprofit Hospitals

Private nonprofit hospitals were established by charitable and voluntary organizations. In the mid-1980s, there were about 20 such hospitals ranging in size from 80 beds to more than 1,500 beds. Originally, nonprofit hospitals received only small government subsidies to complement their own funding but, by the mid-1980s, most of their operating budgets came from the government.2 Similarly, the government covered most of their capital expenditures, contributing between 5 percent and 10 percent of the total capital cost.

Private, For-profit Hospitals

In 1980, there were 11 private hospitals, ranging in size from 80 beds to more than 500. Private hospitals cover their own operating and capital costs, and hence their patient fees were (and still are) almost 10 to 40 times higher than in the public sector.

Overall governance of the hospital sector was divided between the Health and Welfare Branch (HWB) and the Medical and Health Department (MHD). The HWB was in charge of setting overall health sector policy, and the MHD was the executive arm in charge of running the public health care delivery system. By the mid-1980s, the MHB had grown into one of the largest bureaucracies in the Hong Kong public administration system, employing 24,330 people, 13 percent of the civil service. Its two main functions were to directly manage the government hospitals’ 21,337 beds and to supervise nonprofit hospitals.3 Since the nonprofit hospitals had come to play an integral role in providing services to public patients, they were considered part of the public hospital network.
Issues Confronting the Hospital Sector in the 1980s

Three interrelated problems contributed to widespread dissatisfaction with inpatient care: overcrowding of government hospitals, disparity in conditions among the three types of hospitals, and ineffective and fragmented hospital governance.

Overcrowding

The size and distribution of the hospital sector was not in line with the increasing needs and expectations of the populace. Rising demand was driven predominantly by large-scale demographic changes in the postwar period. The population grew by 63 percent, from 3.17 million inhabitants in 1961 to 5.18 million in 1981, and this growth was spread unevenly across the region. The New Territories, where many new immigrants settled, experienced the fastest growth, but hospital facilities were concentrated in Hong Kong Island and Kowloon. In 1984, the distribution of hospital beds per 1,000 inhabitants was, respectively, 5.63, 4.49, and 3.78 in Hong Kong Island, Kowloon, and the New Territories. These trends resulted in overcrowding, long waiting lines, and heavy workloads in public inpatient care facilities. Regional government hospitals had the highest occupancy rate—an average of 92 percent between 1980 and 1985, peaking at 100 percent in 1982—unparalleled in the nonprofit or private for-profit sectors. To ease bed shortages, canvas camp beds were frequently placed temporarily in hospital corridors.

Government versus Nonprofit Hospitals

The second main source of dissatisfaction originated in the disparity in conditions and funding among the different types of hospitals. There was a divide between the government-run and nonprofit hospitals. Disgruntled physicians were constantly moving out of the public and into the private, for-profit sector because of poor working conditions, lack of training opportunities, and little hope of promo-
tion. The public hospital network itself was split between the nonprofit and the government-run hospitals—which were better funded. Physicians and other staff at government-run facilities were employed as civil servants and received pay and fringe benefits such as housing, vacation, sick pay, training subsidies, and pensions. Staff in nonprofit hospitals did not enjoy the same benefits and working conditions, even though their facilities were also publicly funded. As a result, nonprofit hospitals had a hard time hiring and retaining well-qualified professional staff.

**Hospital Sector Governance**

The third issue was related to the public hospital sector’s dual governance structure, which undermined overall health policy coordination and planning. The Medical and Health Department and the Health and Welfare Branch were more rivals than collaborators, competing for greater control in the sector. As a result, coordination was poor between the policy design and implementation processes. The situation was described by K. L. Thong, former MHD director:

> This illogical separation of responsibilities between the policy branch and its executive department is as frustrating to the Department concerned as it is untenable to the Branch since the Branch officers are placed in the unenviable position of having to deal with and even make pronouncements and decisions on policy matters on professional subjects of which they have no knowledge or expertise . . . [A]dministrators of the medical and Health Service are no longer in a position to formulate policies and to take the vital and necessary actions for the smooth running and improvement of the services without intervention from both administrative and political quarters.

The lack of an effective governance structure also contributed to ongoing problems with financial discipline, and many hospitals ran deficits. Running a deficit was sometimes viewed as a means to ensure a bigger budget allocation for the next financial year.
Reform Design

Based on the recommendation of the Scott consultancy report, Hong Kong decided to create a single body—the Hospital Authority—responsible for coordinating hospital care across the entire public network, including both government and nonprofit hospitals. Organizational reform of public hospitals in Hong Kong was heavily complemented by a transformation of hospital management.

External Environment

As noted in chapter 1, hospital organizational reforms consist of actions on three fronts: governance (relationship between public hospitals and the government), the extent to which public hospitals are exposed to market forces and the market environment, and the incentives embedded in the funding/payment mechanisms. The arrangements in these three areas jointly determine the incentive regime and hence the behavior of public hospitals under organizational reform. Hong Kong’s reform entailed limited (or no) change in the last two factors. The establishment of the Hospital Authority shifted the locus of decisionmaking from the government to the HA, which in turn established a centralized planning mechanism to manage and control individual hospitals.

Here we focus on the broad changes in the determinants of incentive regimes. Specific changes in relation to the different incentive regimes are described later in more detail.

The Hospital Authority was created by an Ordinance of the Legislative Council in July 1990. It was legally constituted as a nonprofit public corporation responsible for managing public hospitals on behalf of the government. The Hospital Authority formally took over responsibility for all public (government and nonprofit) hospitals on December 1, 1991, including 38 institutions and more than 37,000 staff members.
The Hospital Authority’s objectives were set forth in the Ordinance:

The Authority shall... manage and develop the public hospital system in ways which are conducive to achieving the following objectives—

(i) to use hospital beds, staff, equipment and other resources efficiently to provide hospital services of the highest possible standard within the resources obtainable;

(ii) to improve the efficiency of hospital services by developing appropriate management structures, systems, and performance measures;

(iii) to improve the environment in public hospitals to meet the needs of patients;

(iv) to attract, motivate, and retain qualified staff;

(v) to encourage public participation in the operation of the public hospital system; and

(vi) to ensure accountability to the public for the management and control of the public hospital system.

**Governance.** Accountability of the HA to the government is exercised through a board, as well as the hospital governing committees (HGCs). The board, supported by its functional committees, is responsible for guiding and overseeing the chief executive and his executive team in formulating and implementing policy strategy. The chief executive and his team carry out executive functions at the head office; the hospital chief executives and their management teams carry out their functions at the hospitals.

**Payment/funding mechanism.** The reform design provided for the HA to have the freedom to set prices, which would have given them additional potential income from user fees, and shifted the balance toward private payment. However, due to strong opposition, the government backed away from this idea. Hence, the method and source
of funding between the government and the public hospital network remain unchanged. The Hospital Authority continued to receive 97 percent of its funding directly from the government budget.

*Market environment.* The market environment within which the HA was established exhibited little competition. The reform in fact institutionalized the monopolistic structure of the hospital market, since it established the Hospital Authority with 89 percent of total beds. Competition between public and private hospitals is limited. Nor does any competitive measure such as contracting or competitive bidding introduce competitive pressures into the market. Prior to the reform, competition had emerged in some input markets, in particular for skilled medical staff. The establishment of the entire public network as a single organization (and monopolistic purchaser) reduced the competition in the markets for inputs.

*The Incentive Regime*

The governance and funding arrangements combined with the market environment to create the incentive regime faced by the HA upon its creation. The elements of this regime are discussed below. Within the HA, governance and incentives for individual hospitals also changed. This is discussed separately in box 10.1.

---

**Box 10.1 Hospital Authority Relations with Individual Hospitals**

In addition to the organizational changes in the relationship between the government and the public hospital network as a whole (in the form of the Hospital Authority [HA]), there were equally critical changes occurring in the relations between the individual hospitals and their new owner-supervisor. Compared with the previous direct administration of government hospitals, the HA was granted considerable autonomy in its operation and decision making. Yet individual hospitals saw their autonomy decline with the
rules imposed by the HA head office, in particular through the annual planning process. Tables 10.2 and 10.3a and b summarize the change in the governance structure before and after the reform of the public hospital network.

As corporations go, the HA is quite centralized—the head office retains direct control over many aspects of operation (service and manpower planning, service coordination, operational organization, monitoring, and evaluation).

Within the corporate structure, however, the HA head office has allocated some *decision rights* to hospital management. For example, a hospital chief executive is allowed to make appointments to all positions except senior management posts reporting directly to him.a However, hospitals are constrained in their hiring and firing decisions by the annual planning process, which establishes the service plans and the associated manpower by rank at each hospital, as agreed with the HA head office. The HA head office must endorse any increases in the agreed number of senior positions.b For more junior positions, hospitals have greater flexibility and discretion, as long as they stay within the agreed overall budget. With the exception of consultant and nurse specialist positions, creation of a new permanent position does not require the HA head office approval as long as the numbers agreed in the manpower plan are not exceeded. To ensure quality professional staff, the HA has established minimum standards and job requirements for all ranks.

Decisions about capital acquisition are jointly determined with the HA head office during the annual planning process. Upon agreement between individual hospitals and the HA head office, the latter submits proposals to the government for approval.

The individual hospitals, like the HA itself, are *residual claimants* on only a minuscule amount of revenue—they

*Box continues on the following page*
Box 10.1 (continued)

retain a portion of the user fees they levy on a small number of services.

Individual hospitals face little *market exposure*, since the major share of funds is still allocated according to a baseline budget.

*Accountability* mechanisms within the HA are, naturally, administrative and hierarchical in nature. The hospital chief executive is accountable to the Hospital Governing Committee (HGC) and the HA chief executive. The HA head office holds regular meetings between deputy directors, cluster managers, and hospitals, where hospital chief executives report on key results and performance targets agreed in the annual plan and service agreements. The hospital chief executive and the senior management team initiate hospital-level planning. Senior management identifies parameters, which are a combination of 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 the HA head office.

Before the establishment of the 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. There was less inclination to work within the confines of the annual budget through increased efficiency or to strive for broader societal goals.

Although such management and control mechanisms represent improvements from the prereform era, in practice, effectiveness of the different monitoring mechanisms is largely constrained by availability of data and information. To hold each level of management accountable, reliable, standardized, and timely evidence is needed on the extent to which performance targets, service outputs, and quality
standards have been met. The current structure puts the onus on subordinates to report up the hierarchy. Financial data at the end of each year are clearly black or red, but the many gray areas in performance and quality outcomes require an effective means of monitoring. This is not to imply that hospitals attempt to deceive their supervising bodies with inflated outcomes, but to show the difficulties of measuring these intangibles by one party, let alone each and every hospital. A related point is the apparent absence of penalties if hospitals do not measure up.

   a. Hospital chief executives are selected by a board made up of members of the HGCs and the chief executive of the Hospital Authority; they are appointed by the HA chief executive. Approval of the HGC is required for the appointment of senior management posts directly reporting to the hospital chief executive. Hospital Authority, Human Resource Policies Manual, chapter C1, July 26, 1994.

   b. For example consultant, chief pharmacist, senior clinical psychologist, senior medical officers.

**Decision rights.** A shift in decision rights (the magnitude of control organizations have over various aspects of their production process) from the government to the HA was a central part of the reform. The HA gained considerable control over various aspects of the production process, including:13

- **Strategic management.** In contrast to the prereform era, the locus of decision rights in public hospitals’ strategic planning and management has been clearly transferred from the government to the Hospital Authority. The HA takes a major role in formulating institutional visions and objectives. One of the HA’s foremost tasks is to formulate the corporate plan, setting out long-term strategies and providing guidance in planning services.
The corporate vision, as developed by senior management at the HA head office and as endorsed by the HA Board and the Health and Welfare Branch, is as follows: “The Hospital Authority will collaborate with other health care providers and caregivers in the community to create a seamless health care environment which will maximize health care benefits and meet community expectations.”

• Outputs and scope of activities. Corporate directions and strategies, as stated in the corporate plan, are operationalized through the HA planning process, the main planning framework. The HA service product list, which spells out the hospitals’ volume and mix of new program initiatives 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 front-line staff so as to align values and priorities in the definition of service products.

With the list of product items and quantum for each in hand, the HA head office works with hospital chief executives in drawing up the plans for individual hospitals. During this process, the quantum might be adjusted to reflect budget constraints, overall service requirements, and local hospitals’ aspirations. Through this process, resources are allocated to the various services for each hospital, and the HA service product list is finalized.

• Inputs. Extensive decision rights over labor were transferred to the HA, including the right to hire and fire its own staff and set the terms of employment. Appointment of principal officers, including the chief executive, needs the approval of the chief executive of the Hong Kong Special Administrative Region (HKSAR). In terms of firing, the HKSAR chief executive has approval authority to dismiss the chief executive; the chief executive, to dismiss staff members of the HA head office and hospital chief executives; and hospital chief executives, to dismiss hospital staff members. Previously, when all hospital staff members were civil servants, hiring and firing decisions were
done through the civil service, according to uniform criteria (i.e., no
differential criteria for physicians).

In terms of capital input, the government still allocates land. The
HA submits proposals to the government for the amount required.
Proposals for capital projects over HK$15 million (US$2 million)
are first submitted to the Health and Welfare Branch for considera-
tion.\textsuperscript{15} Those endorsed by the HWB are then considered under the
government’s Capital Works Reserve Funds allocation exercise and
the Legislative Council. Projects between HK$100,000 and HK$15
million (US$13,333 and US$2 million, respectively) are funded under
the budget of the government’s Architectural Services Department.
The Hospital Authority initiates each capital project proposal for
government funding support. Items below HK$100,000 are consid-
ered recurrent items. Rules for procurement are clearly laid out in
the \textit{Hospital Authority Procurement and Materials Management Manual}.

The HA received expanded authority to procure pharmaceutical
products. Though bulk supply contracts continue to be arranged
through the government supplies department, for items not included
in the bulk contract arrangements, individual institutions purchase
drugs to meet their needs.

\begin{itemize}
  \item \textit{Financial management}. As noted above, the funding arrangements
  were not altered. Hence, decision rights related to raising additional
  resources were not granted the HA. The Hospital Authority has no
  control over pricing, as the HWB must approve setting and changing
  user fees. Only under exceptional circumstances can the Hospital Au-
  thority borrow from the government to meet its obligations as spec-
  ified by the Ordinance. Should that occur, the Hospital Authority is
  subject to directions given by the secretary for health and welfare.

  Government funding continued to be administratively allocated.
  Each year, the Hospital Authority is required to submit its recurrent
  funding requirements to the Health and Welfare Branch. The re-
  current budget is based on the previous year’s budget, adjusted for
  expected change in the service pattern, recurrent costs of new capi-
  tal projects, and the overall government budgetary situation.\textsuperscript{16}
\end{itemize}
Residual claims. The Hospital Authority became the residual claimant on only a tiny amount of hospital income; it is allowed to keep a reserve of up to 5 percent of its budgeted annual recurrent expenditures. Any excess reverts to the government. Though the Hospital Authority may keep part of the additional revenue from new fees, these new fees can only be implemented under government approval. Clearly, access to these funds as a motivation for improved performance is not part of the Hong Kong reform model, as, to date, the government allows the Hospital Authority to keep part of the revenue on only one or two items.

Market exposure. The reform did not include structural changes to increase market exposure for hospitals in the public network. Because the Hospital Authority earns and retains so little of its revenue (only 3 percent of income) from payments for services, its market exposure remained low. The 97 percent of its income that comes from the government budget is not allocated in a strategic form, nor is competition supported; thus these funds do not expose the HA to any marketlike pressure either.

Accountability. The Hong Kong hospital reforms created a board for the HA. Boards serve to hold organizations accountable in a more indirect fashion than direct supervisory intervention on a day-to-day basis. Hence, in this regard, the reforms did move toward creating an accountability regime more congruent with a truly autonomous organization. In most other respects, however, the accountability remained hierarchical and administrative in nature, relying on the direct reporting of subordinates rather than incentives generated by market exposure or payment mechanisms.

• The Board. The reform provided for the HA to be accountable to the Health and Welfare Branch and the community through the board. The board is comprised of community leaders and government representatives. The HKSAR chief executive appoints its chairman. The board delegates authority to the chief executive of the HA head office to carry out the HA mission, goals, objectives, strate-
gies, and purposes. The board monitors the chief executive’s and the HAs performance through senior executive team reports on annual plan targets, progress reports with financial information, and an annual report with audited accounts.

- **Annual plan.** Congruent with its administrative function, HA accountability revolves around measuring performance against the annual plan rather than being driven by incentives induced by market exposure or payment methods. Performance indicators relate to inputs such as number of beds, implementation of clinical protocols, developing cost information system, rather than outcome or output.

- **Financial accountability.** The HA is required to keep within its allotted budget from year to year, in keeping with its responsibility to hold the public hospital system budgetary targets. To exceed budget and secure additional funds, the Hospital Authority needs the Legislative Council’s approval.

**Social functions.** Marketizing organizational reforms usually require that provisions for social functions are made more explicit, to ensure that increased emphasis on financial performance doesn’t undermine delivery of services to the poor and other needy patients. Since the incentives in the Hong Kong reforms did not rely on market exposure or financial performance, it was not necessary to change the mechanisms for ensuring delivery of social functions.

**Complementary Reforms**

In keeping with the administrative nature of the reforms, significant emphasis was placed on improving how things worked inside the hospitals. Management reform in particular was an important complement to the organizational reform in Hong Kong. A key structure put into place during the initial phase of the reform was the New Management Initiative. The main objectives were to establish a proper management infrastructure and the requisite systems in hospitals to facilitate service delivery, strengthen management capability
in hospitals, cultivate the necessary organizational culture and values consistent with modern management concepts, and achieve improvements in fulfillment of the Hospital Authority’s mission.19 (See tables 10.2, 10.3a, and 10.3b.)

The New Management Initiative was implemented in hospitals in three phases over three years. They included:

- Clinical management teams, comprising the chiefs of service, department operations managers, ward managers, and the business and administrative support staff
- Strategic planning
- Business planning, setting out annual operational targets based on longer term strategies identified during the strategic planning process

**Table 10.2** Characteristics of Governance in Hospitals before Corporatization

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**Table 10.3a** Characteristics of Governance after Corporatization: Government and the Hospital Authority

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Table 10.3b Characteristics of Governance after Corporatization: Hospital Authority Head Office and Hospitals

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- New management structure, comprising the hospital chief executive and general managers for finance, nursing, clinical services, allied health services, and administrative services
- Staff development review
- Continual quality improvement
- Operating systems, including new technologies and systems in support services, financial management, and management information (e.g., standardized accounting systems, internal audits, human resource, and payroll system).

Implementation of Reforms

The reform process extended over five years from commissioning the Scott Report to public consultation, legislation, and the actual implementation.

Context

Hospital reform in Hong Kong focused on changing the structure of hospital administration and supervision, rather than opting for a move to create areas of market incentives and performance pressures. Why did Hong Kong choose this direction when countries with similar public sector traditions and less-entrenched laissez-faire economies (the United Kingdom and New Zealand) decided to im-
plement more radical changes in their publicly run health sectors? Hong Kong embarked on this reform process earlier than other countries. The idea of establishing an independent hospital authority crystallized in the mid-1980s when ideas for public sector management incorporating market structures and pressures were beginning to take hold, but application of these reforms to health services was relatively novel and untested. Therefore, these did not enter into the discussions in Hong Kong at the time of the debate.

At the time, it was strongly felt that the public hospital sector’s most egregious problems were the lack of management expertise and the rigidity of the system’s structure, which hampered its ability to adapt to the changing environment. Moreover, poor coordination across facilities and institutional inefficiencies were the main contributory factors to a disorganized public hospital system. In addition, incentives to perform for individuals and organizations were not seen as particularly problematic. Consequently, organizational reform of an administrative nature was seen as the solution.

**Actors**

Although the general concept of the reforms within the public hospital sector was accepted, not all the actors in the system supported specific elements of the proposed reforms. In March 1986, the Executive Council opened a public debate that focused on the overall framework, the financial costs, and benefits of setting up the Hospital Authority, integrating government and publicly funded nonprofit hospitals, and the costs of transferring staff into non-civil-service terms of employment.

Within the government, the Medical and Health Department and the Health and Welfare Branch supported the Scott Report recommendations and the idea of organizational reform. Both parties had expected that it would allow them greater control over the hospital sector. In contrast, the Finance and Civil Service Branches were concerned about the financial implications of the proposed changes. In particular, the Finance Branch feared the cost increase implied by the new terms of service for staff in the reformed hospitals under the new authority, and insisted that the switch be cost-neutral.
Medical staff members in government hospitals opposed the reforms for fear of losing civil service benefits. The Medical and Health Department did its own review and received generally negative feedback. By July 1986, 10,000 hospital staff members had signed a petition opposing the report recommendations. They formed a joint council of 35 hospital staff associations and strongly opposed removing staff from civil service as well as the report, which they thought “failed to submit concrete proposals which would improve ward services and meet the basic needs of patients.”

Medical staff in nonprofit hospitals, however, supported the proposed changes. Primarily, their objective was to secure more resources while maintaining a high degree of autonomy. On this basis, they welcomed the proposed elimination of inequities in employment conditions and status. Yet they were not enthusiastic about the idea of a new independent supervisory body that might control resources and internal management more stringently than the Medical and Health Department. Boards of nonprofit hospitals were concerned about losing their charitable or voluntary identities.

The community at large maintained a low profile during the debate and held mixed opinions. The public-as-patient sought relief from overcrowding and declining service standards, while the public-as-taxpayer was anxious lest changes and improvements in the health care system entail increased fees, higher taxes, or reduced access. Opponents were generally concerned that the government would withdraw from its responsibility of providing medical services. At the end of the day, the government was able to persuade the public that the reforms would not mean reducing the scope of government responsibility, which somewhat lessened opposition to reforms.

**Process**

While the reform process followed a top-down approach, the long duration provided plenty of opportunity for the government to consider various points of view and reach compromises. At the same time, however, disagreements did not deter the government from proceeding with its plan. After the public consultation process, serious disagreements remained with government medical staff, but ini-
tial steps to establish the Hospital Authority were taken. The Provisional Hospital Authority was established in 1988 and was charged with developing a detailed implementation plan based on the Scott Report’s recommendations, outlining strategies for merging staff of the nonprofit and government hospitals, and constructing a legislative framework for the proposed Hospital Authority. Its three main tasks were related to addressing concerns over employment conditions, level of cost recovery, and staffing for the administration.

The dispute over employment conditions was the main stumbling block in the process of establishing the Hospital Authority. More than 22,000 employees in civil service status under the Hospital Services Department were meant to switch to Hospital Authority employment with new terms and conditions. Unions demanded better payment conditions against the insistence of the Finance Branch that the switch be cost-neutral. Since the proposed benefits meant more equitable salaries and benefits for nonprofit hospital staff, cost-neutrality could have been achieved only at the expense of the benefits of Medical and Health Department medical staff. Finally, after a protracted bargaining process that lasted beyond passing the HA Ordinance, the government agreed to a compromise. The compromise entailed a benefit package comparable with civil service terms and a grandfather clause to allow Hospital Services Department employees a choice of either accepting the new HA terms or continuing employment with the civil service. Staff members were allowed three years to decide whether to transfer to HA terms and conditions or remain on civil service and nonprofit terms. Ninety percent of nonprofit hospital staff opted for new terms while only 24 percent of former Medical and Health Department staff were willing to give up civil service benefits. At the end of the three years, only about 25 percent of HA employees remained on civil service status.

The second issue was related to the level of cost recovery. Originally, increased cost recovery had been an integral part of the Hospital Authority’s financial plan, but these efforts were shelved when public pressure groups strongly protested fee increases. In response, the government decided that the Hospital Authority would not be permitted to set fees and charges. Any user fee changes had to be
cleared with the Health and Welfare Branch. Thus, the Hospital Au-
thority became almost entirely reliant on government financing.

The final concern was related to HA staffing issues in recruiting
acceptable personnel for executive positions at the head office and as
hospital chief executives. It was decided to offer attractive remuner-
ation packages to recruit and retain qualified staff with managerial
acumen.24

**Assessment of the Impact**

Assessing the impact of organizational changes on hospitals is a chal-
lenging task. First, in many instances, there is lack of time-series data
to make pre- and postreform comparisons. Second, the identification
of a valid control group is not always feasible to tease out the pure ef-
effect of organizational changes from other developments affecting the
health sector. Third, reform measures usually take time to change
the behavior of key players, thus our assessment is necessarily pre-
liminary. Given these caveats, we attempt to marshal available indica-
tions of performance change.

Several aspects of hospital behavior and performance will be ex-
amined. The first two relate to addressing problems specific to the
pre-HA hospital sector, namely, to reduce overcrowding and address
provider dissatisfaction. Our findings suggest that the Hospital Au-
thority has made large strides in meeting both objectives. The sec-
ond two performance measures include quality and efficiency im-
provements—the ultimate objectives of hospital reform in all
countries. Our findings suggest that certain aspects of quality have
improved while others remain to be addressed. In terms of efficiency
gains, evidence is still inconclusive.

The HA has expanded its own direct procurement and now pro-
cures about 30 percent of its own pharmaceutical needs.

Coordination among hospitals seems to have improved as well.
Before the establishment of the Hospital Authority, hospitals focused
almost exclusively on their own activities and services, without view-
ing themselves in the context of the entire public system or the
greater community. There was less inclination to work within the confines of the annual budget through increased efficiency or to strive for broader societal goals.

**Human Resource Issues**

One of the main problems before the Hospital Authority’s creation was the public sector’s difficulty in keeping good doctors in the system. Beyond pay and working conditions, medical staff morale is an important contributor to effective, efficient, and high-quality health services. The Hospital Authority has placed great emphasis on creating improved conditions for medical staff. As part of the management initiatives, staff development review was implemented to promote manager-staff communication and to manage performance. At the same time, sizable resources were injected to construct new facilities and renovate existing ones to improve the working environment. For example, all hospitals are now air-conditioned. In addition, the HA has been able to use its ability to offer attractive remuneration packages to get needed management skills. There is now indication that HA staff satisfaction has become better: attrition rates have been declining since the early 1990s (table 10.4).

**Financial Discipline**

Financial discipline in Hong Kong’s health sector has undergone considerable improvement since the establishment of the Hospital

**Table 10.4** Hospital Authority Attrition Rates (percent)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctors</td>
<td>8.7</td>
<td>7.2</td>
<td>6.8</td>
<td>6.7</td>
<td>7.0</td>
<td>4.6</td>
</tr>
<tr>
<td>Nurses</td>
<td>8.4</td>
<td>8.2</td>
<td>10.9</td>
<td>9.3</td>
<td>8.6</td>
<td>5.7</td>
</tr>
<tr>
<td>Allied health</td>
<td>8.6</td>
<td>8.1</td>
<td>10.3</td>
<td>9.1</td>
<td>6.1</td>
<td>4.8</td>
</tr>
<tr>
<td>Hospital Authority, overall</td>
<td>10.3</td>
<td>12.3</td>
<td>13.8</td>
<td>8.2</td>
<td>7.2</td>
<td>5.4</td>
</tr>
</tbody>
</table>

*Source: Hospital Authority.*
Authority, which has so far adhered to balanced budgets. To enforce financial discipline at the hospital level, the HA head office uses its centralized powers to continually monitor hospital-level financial performance. Should hospitals foresee a shortfall due to unforeseen circumstances, they are expected to make the HA head office aware of the situation as soon as possible and plan, as agreed, to manage the shortfall. This could mean additional resources released from HA head office reserves or service reduction to contain or eliminate the shortfall (other hospitals may take up additional services or capacity). This is a big improvement over the prereform era problems with financial discipline.

**Accountability**

Accountability in the system as a whole appears to have improved. However, problems remain as well. In particular, effectiveness of the different monitoring mechanisms is largely constrained by the availability of data and information. To hold each level of management accountable, reliable, standardized, and timely evidence is needed on the extent to which performance targets, service outputs, and quality standards have been met. The current structure puts the onus on subordinates to report up the hierarchy. Financial data at the end of each year are clearly black or red, but the many gray areas in performance and quality outcomes require an effective means of monitoring. This is not to imply that hospitals attempt to deceive their supervising bodies with inflated outcomes, but to show the difficulties of measuring these intangibles by one party, let alone each and every hospital. A related point is the apparent absence of penalties if hospitals do not measure up.

**Overcrowding and Access**

Overcrowding in major public hospitals has significantly declined. Occupancy rates in selected major hospitals declined to below 80 percent from the previously extremely high rates, and camp beds have been less commonly seen. Of course these improvements can only be partially attributed to the reforms, since the number of beds
available has also increased. The opening of additional public sector beds raised the ratio of total beds per 1,000 population from 4.4 in 1990 to 4.7 in 1996.

**Quality**

An assessment of the specific aspects of quality change reveals the following conclusions: the Hospital Authority has succeeded in improving certain aspects of service quality, but improvements in other quality-related aspects have not yet fully materialized (tables 10.5 and 10.6). Hospital environment is the highest-rated quality component of patient assessments. However, improved facilities could be attributed to the increased funding that accompanied corporatization rather than organizational change. There is general consensus that interpersonal aspects of medical care, including attitude of medical staff, responsiveness to patients, and communications with relatives, have improved, in part because of the more patient-centered focus. Waiting time remains a major source of dissatisfaction among

**Table 10.5** Patient Satisfaction with Selected Aspects of Hospital Authority Services, 1997

<table>
<thead>
<tr>
<th>SERVICE/FACILITY</th>
<th>SATISFIED (PERCENT)</th>
<th>DISSATISFIED (PERCENT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical environment</td>
<td>71.4</td>
<td>4.7</td>
</tr>
<tr>
<td>Medical facilities</td>
<td>70.8</td>
<td>4.1</td>
</tr>
<tr>
<td>Quality of medical care</td>
<td>67.6</td>
<td>6.7</td>
</tr>
<tr>
<td>Attitude of nonmedical staff</td>
<td>65.5</td>
<td>8.0</td>
</tr>
<tr>
<td>Attitude of medical staff</td>
<td>64.7</td>
<td>10.8</td>
</tr>
<tr>
<td>Waiting time for accident and emergency treatment</td>
<td>43.0</td>
<td>36.3</td>
</tr>
<tr>
<td>Booking time for operations</td>
<td>34.7</td>
<td>43.1</td>
</tr>
<tr>
<td>Queuing time for SOPD appointment</td>
<td>34.6</td>
<td>50.4</td>
</tr>
<tr>
<td>Waiting time for SOPD treatment</td>
<td>33.8</td>
<td>48.9</td>
</tr>
<tr>
<td>Quality of food</td>
<td>40.7</td>
<td>24.0</td>
</tr>
</tbody>
</table>

SOPD Specialist outpatient department

Note: Sample consisted of Hospital Authority service users, which may lead to upward bias in results.

Source: Hospital Authority, Patient Satisfaction Survey, April 17, 1998.
patients. Half the respondents were dissatisfied with the length of waiting for appointments, and 23 percent and 11 percent, respectively, of HA users indicated that queuing and waiting times needed to be improved (table 10.6). Although waiting time for first attendance in HA specialist outpatient clinics declined initially, it has since risen: from 8 weeks in 1992–93 to 11.4 weeks in 1996–97. The volume of specialist outpatient visits has increased over the years, but this can only partially explain the rise in waiting time.

Based on patient focus-group meetings, lack of physician choice in public facilities and lack of interface between public-private and primary-tertiary care are further sources of user dissatisfaction. Despite the Hospital Authority’s ongoing efforts to create a “seamless health care environment,” evidence is by far less optimistic. For example, when patients are discharged from a hospital, they are referred to general outpatient clinics where they often see different providers on each visit; moreover, their records may not routinely follow them. Additional issues arise when patients are referred for care or follow-up across sectors, largely because of a serious lack of communication

Table 10.6 What Do Public Hospitals Most Need to Improve?

<table>
<thead>
<tr>
<th>SERVICE/FACILITY</th>
<th>1995 (PERCENT)</th>
<th>1996 (PERCENT)</th>
<th>1997 (PERCENT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Queuing time for the specialist outpatient clinic</td>
<td>24.8</td>
<td>24.3</td>
<td>22.5</td>
</tr>
<tr>
<td>Waiting time for the specialist outpatient clinic</td>
<td>14.6</td>
<td>14.3</td>
<td>10.6</td>
</tr>
<tr>
<td>Waiting time for A&amp;E services</td>
<td>6.2</td>
<td>8.5</td>
<td>12.6</td>
</tr>
<tr>
<td>Attitude of medical staff</td>
<td>10.5</td>
<td>7.2</td>
<td>8.9</td>
</tr>
<tr>
<td>Quality of medical care</td>
<td>4.0</td>
<td>6.8</td>
<td>7.2</td>
</tr>
<tr>
<td>Physical environment</td>
<td>3.7</td>
<td>3.9</td>
<td>4.1</td>
</tr>
<tr>
<td>Queuing time for operation</td>
<td>3.7</td>
<td>3.3</td>
<td>3.9</td>
</tr>
<tr>
<td>Medical facilities</td>
<td>5.4</td>
<td>3.3</td>
<td>3.9</td>
</tr>
<tr>
<td>Attitude of nonmedical staff</td>
<td>1.6</td>
<td>1.5</td>
<td>2.4</td>
</tr>
<tr>
<td>Quality of food</td>
<td>2.1</td>
<td>3.3</td>
<td>2.2</td>
</tr>
<tr>
<td>Don’t know/hard to say</td>
<td>23.4</td>
<td>23.7</td>
<td>21.6</td>
</tr>
<tr>
<td></td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

A&E Accident and emergency.
Source: Hospital Authority, Patient Satisfaction Survey, April 17, 1998.
or information exchange between hospital-based and community-based practitioners.

Patient feedback is another area of quality that has yet to show improvement. In the HA Patient Satisfaction Survey, only 35 percent of the patients think that the Hospital Authority “cares about patients’ concerns” or “responds to patients’ needs.” Over time, evaluations of these dimensions have not improved. The Hospital Authority has set up a hierarchical complaint system: complaints and appeals are originally filed in the hospitals through the HA head office or through offices of Legislative Council members and are then referred to the Public Complaints Committee. However, decisions regarding actions to be taken are largely dominated by medical professionals and HA staff. For example, the committee’s membership consists of the chairman (who has to be a member of the Hospital Authority), and two other HA members. Patients interviewed by the study team expressed a lack of confidence in the complaint process. Most complaints and appeals were found to be “unsubstantiated,” and patients saw little point in going to the effort of lodging a formal complaint. In 1996–97, for instance, out of the 1,735 complaints filed at hospital level, only 21 were referred to the HA head office’s complaints committee, and only 1 was substantiated.

**Productive Efficiency**

According to international standards, changes in productive efficiency should be measured by cost per episode of illness, adjusting for case mix. Since the Hospital Authority has not collected historical data, it was necessary to rely on proxy data such as cost per bed-day or discharge, which gave ambiguous results. The cost per visit decreased for specialist outpatient care and emergency services but increased for general outpatient care between 1992–93 and 1996–97 (table 10.7). For inpatient services, while the cost per discharge fell, the cost per bed-day increased. The weighted average of cost per output for all services declined when discharges were used as an output measure for inpatient services, but increased when bed-days were used as the output measure.
### Table 10.7: Trends in Recurrent Cost per Unit of Output (Real 1990 = 100)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INPATIENT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1)  Cost per discharge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute care hospitals^b</td>
<td>8,792</td>
<td>8,532</td>
<td>8,266</td>
<td>7,885</td>
<td>8,061</td>
<td>—</td>
</tr>
<tr>
<td>Year-to-year growth (percent)</td>
<td>—</td>
<td>−3.0</td>
<td>−3.1</td>
<td>−4.6</td>
<td>2.2</td>
<td>−2.2</td>
</tr>
<tr>
<td>General and extended hospitals</td>
<td>11,734</td>
<td>12,483</td>
<td>13,664</td>
<td>14,928</td>
<td>15,809</td>
<td>—</td>
</tr>
<tr>
<td>Year-to-year growth (percent)</td>
<td>—</td>
<td>6.4</td>
<td>9.5</td>
<td>9.3</td>
<td>5.9</td>
<td>7.7</td>
</tr>
<tr>
<td>Psychiatric hospitals</td>
<td>111,822</td>
<td>111,709</td>
<td>111,387</td>
<td>120,210</td>
<td>118,286</td>
<td>—</td>
</tr>
<tr>
<td>Year-to-year growth (percent)</td>
<td>—</td>
<td>−0.1</td>
<td>−0.3</td>
<td>7.9</td>
<td>−1.6</td>
<td>1.4</td>
</tr>
<tr>
<td>Overall</td>
<td>10,042</td>
<td>9,859</td>
<td>9,602</td>
<td>9,279</td>
<td>9,481</td>
<td>—</td>
</tr>
<tr>
<td>Year-to-year growth (percent)</td>
<td>—</td>
<td>−1.8</td>
<td>−2.6</td>
<td>−3.4</td>
<td>2.2</td>
<td>−1.4</td>
</tr>
<tr>
<td>(2)  Cost per bed-day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute care hospitals^b</td>
<td>1,585</td>
<td>1,596</td>
<td>1,639</td>
<td>1,621</td>
<td>1,643</td>
<td>—</td>
</tr>
<tr>
<td>Year-to-year growth (percent)</td>
<td>—</td>
<td>0.7</td>
<td>2.7</td>
<td>−1.1</td>
<td>1.4</td>
<td>0.9</td>
</tr>
<tr>
<td>General and extended hospitals</td>
<td>699</td>
<td>724</td>
<td>764</td>
<td>796</td>
<td>844</td>
<td>—</td>
</tr>
<tr>
<td>Year-to-year growth (percent)</td>
<td>—</td>
<td>3.6</td>
<td>5.6</td>
<td>4.1</td>
<td>6.0</td>
<td>4.8</td>
</tr>
<tr>
<td>Psychiatric hospitals</td>
<td>414</td>
<td>440</td>
<td>430</td>
<td>456</td>
<td>472</td>
<td>—</td>
</tr>
<tr>
<td>Year-to-year growth (percent)</td>
<td>—</td>
<td>6.1</td>
<td>−2.2</td>
<td>5.9</td>
<td>3.5</td>
<td>3.3</td>
</tr>
<tr>
<td>Overall</td>
<td>1,092</td>
<td>1,112</td>
<td>1,160</td>
<td>1,182</td>
<td>1,222</td>
<td>—</td>
</tr>
<tr>
<td>Year-to-year growth (percent)</td>
<td>—</td>
<td>1.9</td>
<td>4.3</td>
<td>1.9</td>
<td>3.4</td>
<td>2.9</td>
</tr>
<tr>
<td><strong>OUTPATIENT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specialist outpatient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(cost/attendance)</td>
<td>329</td>
<td>313</td>
<td>297</td>
<td>282</td>
<td>299</td>
<td>—</td>
</tr>
<tr>
<td>Year-to-year growth (percent)</td>
<td>—</td>
<td>−4.9</td>
<td>−5.1</td>
<td>−5.1</td>
<td>6.0</td>
<td>−2.4</td>
</tr>
<tr>
<td>Accident and emergency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(cost/attendance)</td>
<td>385</td>
<td>390</td>
<td>343</td>
<td>317</td>
<td>300</td>
<td>—</td>
</tr>
<tr>
<td>Year-to-year growth (percent)</td>
<td>—</td>
<td>1.3</td>
<td>−12.1</td>
<td>−7.6</td>
<td>−5.4</td>
<td>−6.0</td>
</tr>
<tr>
<td>General outpatient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(cost/attendance)</td>
<td>108</td>
<td>120</td>
<td>123</td>
<td>114</td>
<td>123</td>
<td>—</td>
</tr>
<tr>
<td>Year-to-year growth (percent)</td>
<td>11.1</td>
<td>2.5</td>
<td>−7.3</td>
<td>7.9</td>
<td>3.3</td>
<td>—</td>
</tr>
<tr>
<td>Community nursing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(cost/attendance)</td>
<td>—</td>
<td>—</td>
<td>267</td>
<td>251</td>
<td>221</td>
<td>—</td>
</tr>
<tr>
<td>Year-to-year growth (percent)</td>
<td>—</td>
<td>—</td>
<td>−6.0</td>
<td>−12.0</td>
<td>n.a.^c</td>
<td>—</td>
</tr>
<tr>
<td>Outpatient overall growth</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(weighted, using cost per discharge for inpatient—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without community nursing)</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>−1.8</td>
</tr>
<tr>
<td>Outpatient overall growth</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(weighted, using cost per bed-day for inpatient—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>without community nursing)</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.6</td>
</tr>
</tbody>
</table>

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a. Cost per bed-day/attendance is calculated based on the method used for fees and charges purposes, which includes staff cost, drugs and consumables, depreciation, services provided by government departments, and allocated share of overhead and supporting services.

b. Mentally handicapped beds are deducted from acute care hospitals and included in the calculation for psychiatric hospitals.

c. Too few years.

Source: Compiled by authors based on data provided by the Hospital Authority.
We examined the trends in output and input separately. Table 10.8 shows the rate of increase in output disaggregated by different HA services. An overall output growth indicator—generated by weighting the relative share of services in total HA expenditures—suggests that output grew by 4.9 percent (using the total number of hospital days) or 7.5 percent (using the number of discharges for inpatient services). In terms of input, the annual average growth rate amounted to 3.7 percent for hospital beds, 5.2 percent for HA employees, and 10.6 percent for capital expenditures, if construction of new facilities is not taken into account (in real terms). Since growth in inpatient admissions is made possible with new bed openings, the 10.6 percent growth in capital expenditures underestimates the resources input to produce the hospital admissions. Among HA employees, the greatest growth rate was among administrative and management staff, as a result of modernized management techniques introduced after the Hospital Authority’s formation. Another staff category that experienced a high growth rate was consultant physicians.

Such trends are consistent with several hypotheses. First, previously long stays have been reduced or replaced by day surgery, leading to cost reduction per discharge, but cost per bed-day increased, since patients who cannot be shifted to the ambulatory or community settings are more severely ill. This could be an improvement in efficiency. Second, the reduction in lengths of stay is achieved at the expense of premature discharge, leading to medical complications and higher readmission rates. Third, the increase in cost per day is due to changes in labor mix or labor and capital mix with no commensurate increase in output. For example, while the number of physicians grew by 6.2 percent between 1992–93 and 1997–98, the number of consultants grew by almost 14 percent. Fourth, the increase in bed-days is due to quality improvement. These hypotheses, of course, are not mutually exclusive.

To verify these hypotheses, data on case mix, readmission rates, cost per bed-day for day surgery versus inpatient stay, quality changes, and the like are required. Data made available to us do not allow differentiation among these hypotheses; hence, whether production efficiency has improved in the Hospital Authority remains ambiguous.
### Table 10.8 Hospital Authority Trends in Outputs

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INPATIENT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of admissions</td>
<td>710,081</td>
<td>761,599</td>
<td>840,885</td>
<td>919,743</td>
<td>958,452</td>
<td>985,469</td>
</tr>
<tr>
<td>Year-to-year growth (percent)</td>
<td>—</td>
<td>7.3</td>
<td>10.4</td>
<td>9.4</td>
<td>4.2</td>
<td>2.8</td>
</tr>
<tr>
<td>Number of admissions(^\text{a})</td>
<td>660,375</td>
<td>708,287</td>
<td>769,410</td>
<td>852,602</td>
<td>896,153</td>
<td>919,443</td>
</tr>
<tr>
<td>Year-to-year growth (percent)</td>
<td>—</td>
<td>7.3</td>
<td>8.6</td>
<td>10.8</td>
<td>5.1</td>
<td>2.6</td>
</tr>
<tr>
<td>Total length of stay</td>
<td>6,532,025</td>
<td>6,694,138</td>
<td>6,945,610</td>
<td>7,218,575</td>
<td>7,437,442</td>
<td>7,764,699</td>
</tr>
<tr>
<td>Year-to-year growth (percent)</td>
<td>—</td>
<td>2.5</td>
<td>3.8</td>
<td>3.9</td>
<td>3.0</td>
<td>4.4</td>
</tr>
<tr>
<td><strong>OUTPATIENT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accident and emergency</td>
<td>1,402,451</td>
<td>1,492,637</td>
<td>1,735,537</td>
<td>1,979,212</td>
<td>2,080,006</td>
<td>2,168,777</td>
</tr>
<tr>
<td>Year-to-year growth (percent)</td>
<td>6.4</td>
<td>16.3</td>
<td>14.0</td>
<td>5.1</td>
<td>4.3</td>
<td>9.1</td>
</tr>
<tr>
<td>Specialist outpatient</td>
<td>4,415,381</td>
<td>4,710,253</td>
<td>5,273,575</td>
<td>5,884,588</td>
<td>6,461,935</td>
<td>7,362,940</td>
</tr>
<tr>
<td>Year-to-year growth (percent)</td>
<td>—</td>
<td>6.7</td>
<td>12.0</td>
<td>11.6</td>
<td>9.8</td>
<td>13.9</td>
</tr>
<tr>
<td>Community nursing</td>
<td>270,658</td>
<td>281,972</td>
<td>298,224</td>
<td>335,299</td>
<td>383,401</td>
<td>439,319</td>
</tr>
<tr>
<td>Year-to-year growth (percent)</td>
<td>—</td>
<td>4.2</td>
<td>5.8</td>
<td>12.4</td>
<td>14.3</td>
<td>14.6</td>
</tr>
<tr>
<td>General outpatient</td>
<td>801,108</td>
<td>760,145</td>
<td>741,298</td>
<td>757,829</td>
<td>754,572</td>
<td>759,127</td>
</tr>
<tr>
<td>Year-to-year growth (percent)</td>
<td>—</td>
<td>-5.1</td>
<td>-2.5</td>
<td>2.2</td>
<td>-0.4</td>
<td>0.6</td>
</tr>
</tbody>
</table>

**OVERALL**

<table>
<thead>
<tr>
<th>ANNUAL GROWTH (compounded)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.51</td>
</tr>
<tr>
<td>4.93</td>
</tr>
</tbody>
</table>

---

- Not applicable.
- Adjusted for transfers.

*Source:* Compiled by authors based on data provided by the Hospital Authority.
Besides, costs presented in table 10.7 reflect only recurrent expenditures. Capital investment in technology and information systems that allow for substitution of more day surgery and elimination of unnecessary length of stay per discharge are not included.28

Conclusions

Like the other reforms in this volume, Hong Kong’s hospital reforms involved organizational change. That is, the reforms entailed structural changes that shifted rights, responsibilities, and functions around the system.29 And, like the other reforms, they created autonomy by transferring many decisions away from the government bureaucracy to a subordinate unit. But this is where the similarities end.

Perhaps because their public sector functions at a relatively high level, incentives for performance were not viewed as a core problem in the Hong Kong public hospital network. Thus, while the reforms did delegate much autonomy to the HA, they did not directly address the issue of the incentives that would determine what the HA would do with its autonomy. Evidently, it was intended that accountability would continue to be derived from line authority combined with a new focus on meeting performance targets. This somewhat discordant structure appears to have been effective on a number of fronts. Combined with a direct and sustained initiative to improve management, the organizational reform succeeded in improving some aspects of the public hospital system.

The HA’s strategy of mimicking the corporate model in their operation and relations with subordinate hospitals seems to have relieved the public hospital network of some of its more egregious problems. Relative to the previous supervisory structure, these mechanisms have proven effective in improving the performance of public hospitals. In particular, the annual planning process makes production much more objective and results-oriented and makes some explicit linkages to inputs and outputs.

Some lessons can be gleaned from Hong Kong’s reform experience. First of all, in addition to structural reform, management re-
form appears to have been crucial to Hong Kong’s success. When organizational changes give hospital management new decision rights and responsibilities, sound management is essential throughout the transition phase and beyond. Significant financial and human resources have been needed to develop and implement management structures and processes for annual planning, continual quality improvement, information systems, managerial recruitment, staff development, and standardized accounting systems.

Second, as decision rights were delegated to the Hospital Authority, the government’s ability to assert direct accountability diminished, while the new performance monitoring system seems not to have fully compensated for this. The existing structure and mechanism for accountability rely solely on reporting by subordinate units—the Hospital Authority to the Health and Welfare Branch, or the individual hospitals to the HA head office—on performance measured against the annual plan, with few incentives imposed by market pressures or incentive-based payment mechanisms. The effectiveness of this structure is further constrained by measurable outcome and data availability. During the initial set-up period, most available indicators focused on outputs such as utilization measures instead of health outcomes and efficiency. Although efforts are now being made to develop measures of clinical outcomes, how such information is being collected, used, and fed back into the planning process is unclear.

Finally, Hong Kong’s experience underscores the peril of hospital reforms designed without adequately taking into consideration wider health system policy and performance. The design of the Hong Kong reform was (hospital) sector-specific and ignored the relationship with other parts of the health system, namely, private hospitals and primary care (85 percent of primary care is delivered privately). Thus, the reform further institutionalized the segmentation of the health system as a whole. The reform was not accompanied by any financing reform. While the cost of services at public hospitals remains highly subsidized and the quality and scope of services have improved under the reform, the Hospital Authority experienced a rapid surge in demand. Eight years into its operation, the Hong
Kong government’s burden to finance health care services is growing. The delivery system is highly fragmented, with limited coordination between the public and private sectors or between the tertiary and primary/community sectors, despite the Hospital Authority’s mission to create a seamless health care system. Organizational reform of the public hospital sector must always be considered in relation to other key players and components of the entire health system.

Notes

2. In Hong Kong, private, nonprofit hospitals are referred to as “subvented” due to their reliance on government funding.
7. Hutcheon, Bedside Manner, p. 34.
9. Ibid., p. 78.
10. Scott, The Delivery of Medical Services in Hospitals.
11. While the subvented hospitals retained ownership of buildings, their management and control was transferred to the Hospital Authority.
Authority, and from then on they received funding on the same basis as government-owned hospitals.


14. The derivative strategies are: (1) developing outcome-focused health care to maximize health benefits and meet community expectations; (2) creating seamless health care by restructuring and reorganizing medical services in collaboration with other providers and caregivers in the community; (3) involving the community as partners in health in the decision-making process; (4) cultivating organization transformation and development through a multidisciplinary team approach to holistic patient care and continual quality improvement; (5) promoting corporate infrastructure development and innovation to support service improvement.

15. Each proposal would include building works costs, funding for furniture and equipment, and recurrent consequences.

16. The administrative costs of the Hospital Authority’s head office are also included in the overall budget, based on existing head office salaries and other costs as well as planned new administrative costs that have to be agreed on with the HWB. Hospital Authority, PC-P53, *Overview of Government Funding of Hospital Authority Services; P647: Budget Allocation 1998/99*.

17. Based on the draft Memorandum of Administrative Agreement between the government and the HA.

18. See chapter 1, this volume, for a further discussion of social functions and organizational reforms.


21. Experience and problems encountered in implementation are documented in Yip and Hsiao, “Organizational Reform in the Public Hospital Sector.”

22. Scott, *The Delivery of Medical Services in Hospitals*.


24. For a more detailed account of the implementation process and problems encountered, see Yip and Hsiao, “Organizational Reform in the Public Hospital Sector.”


26. Output is measured by admissions, bed-days, and visits.

27. The average length of stay fell from 9.2 to 7.2 days for general specialties between 1992–93 and 1996–97, and 12.3 to 10.1 days for all specialties (general and psychiatry, mentally handicapped, and infirmary).

28. Government funding to the Hospital Authority consists of three block grants: one for all recurrent expenditure that HA can deploy flexibly, retaining any unspent funds in its reserve up to a maximum 5 percent of its budgeted expenditure, and two capital grants specifically for plant and equipment and information technology.

29. See chapter 1, this volume, for further elaboration on the distinction between organizational and other types of hospital reforms.
In September of 1992, the Government of Malaysia corporatized its national referral cardiac center, the National Heart Institute (NHI). Unlike the other cases in this volume, the Malaysian reform was applied to a single hospital, one that had been recently established. Following successful application in the state-owned enterprise sector, corporatization was the chosen model to reform the hospital sector as well—where cost escalation was seriously straining the budget. Perhaps because of the benchmark of public enterprise reform, the government opted for the relatively far-reaching reform of corporatization—extending management considerable autonomy, enshrined in independent legal status. Revenue was retained in the facility; service lines were largely decided upon there as well. Accountability was provided for indirectly, via a board of directors. Social functions were partially made explicit, though a good deal of cross-subsidization continued to be required to cover the cost of services provided to poor patients. All in all, the Malaysian reform represents one of the rare cases of hospital corporatization in a developing country.
As it appears to have been relatively successful, it merits thorough scrutiny by others contemplating a similar path. The one notable proviso is that the reform has proven successful only as applied to a single, newly established hospital, which makes it hard to draw conclusions for policymakers who are considering applying the reform to a larger number of facilities.

Context and Background

Since independence in 1957, Malaysia has made impressive gains in delivering quality health care services to its diverse and diffuse population (21.7 million). Malaysians’ life expectancy has increased dramatically (table 11.1). With improved health care and increasing numbers of children surviving to adulthood, people 59 years or older will make up more than 13 percent of the population by 2025.

Malaysia’s changing demographic and health profiles have important implications for the quality, cost, and scope of health care services. Chronic illnesses are already the chief medical problem, one that puts different demands than in the past on hospitals and doctors. Doctors need expensive, sophisticated, imported medical technologies for diagnosis and treatment. Recently, infectious diseases such as tuberculosis—especially drug-resistant strains—and malaria have reemerged, and HIV/AIDS poses additional challenges.

The Malaysian government has always viewed the development of the health sector as an integral part of the country’s socioeconomic development. As part of longstanding efforts to alleviate poverty, the government has targeted the poor and underprivileged in delivering health care and other public services. The strategy of ensuring equity and access to health care for all originated in the Rural Health Services (RHS) initiative of the 1950s to provide health care to 75 percent of the population in rural villages.

The Ministry of Health (MOH), with other social sector agencies, undertook massive construction projects to establish the physical infrastructure for its first rural health services. Next came services in
cities and towns. Expanding distribution of health care facilities continually improved geographical access. Economic access was assured when people who could not afford to pay were given care free of charge. Because of these accomplishments, other developing countries look to Malaysia’s public health care system as a model.

The Sixth National Plan (1991–95) further improved the distribution of facilities. Efforts were made to provide affordable health care, enhance the quality of curative and preventive programs, and train more manpower for the health sector. The Seventh Plan (1996–2000), which brought in reforms including the corporatization and privatization of public facilities, should be seen in this context of continued commitment to social policy.

Table 11.1 Socioeconomic and Demographic Indicators, Selected Asian Countries, 1996

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>MALAYSIA</th>
<th>INDONESIA</th>
<th>THAILAND</th>
<th>REP. OF KOREA</th>
<th>JAPAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (millions)</td>
<td>21</td>
<td>197</td>
<td>60</td>
<td>46</td>
<td>126</td>
</tr>
<tr>
<td>GNP per capita (U.S. dollars)</td>
<td>4,370</td>
<td>1,080</td>
<td>2,960</td>
<td>10,610</td>
<td>40,950</td>
</tr>
<tr>
<td>Health expenditure (percentage of GDP)</td>
<td>-1.4</td>
<td>0.7</td>
<td>1.4</td>
<td>1.8</td>
<td>5.5</td>
</tr>
<tr>
<td>Total</td>
<td>—</td>
<td>1.5</td>
<td>5.3</td>
<td>5.4</td>
<td>7.0</td>
</tr>
<tr>
<td>Public</td>
<td>-1.4</td>
<td>0.7</td>
<td>1.4</td>
<td>1.8</td>
<td>5.5</td>
</tr>
<tr>
<td>Private</td>
<td>—</td>
<td>0.8</td>
<td>3.9</td>
<td>3.6</td>
<td>1.5</td>
</tr>
<tr>
<td>Births (per 1,000 population)</td>
<td>27</td>
<td>23</td>
<td>17</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Deaths (per 1,000 population)</td>
<td>5</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Age dependency ratio</td>
<td>0.7</td>
<td>0.6</td>
<td>0.5</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Annual growth rate (percent)</td>
<td>1.6</td>
<td>1.3</td>
<td>0.6</td>
<td>0.7</td>
<td>0.1</td>
</tr>
<tr>
<td>Life expectancy at birth (years)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>70</td>
<td>63</td>
<td>67</td>
<td>68</td>
<td>77</td>
</tr>
<tr>
<td>Female</td>
<td>74</td>
<td>67</td>
<td>74</td>
<td>76</td>
<td>83</td>
</tr>
<tr>
<td>Infant deaths (per 1,000 live births)</td>
<td>11</td>
<td>49</td>
<td>35</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Access to sanitation (percentage of population)</td>
<td>91</td>
<td>51</td>
<td>70</td>
<td>100</td>
<td>85</td>
</tr>
<tr>
<td>Access to health care (percentage of population)</td>
<td>88</td>
<td>43</td>
<td>59</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Physicians (per 1,000 population)</td>
<td>0.4</td>
<td>0.2</td>
<td>0.2</td>
<td>1.2</td>
<td>1.8</td>
</tr>
<tr>
<td>Total fertility rate (per woman)</td>
<td>3.4</td>
<td>2.6</td>
<td>1.8</td>
<td>1.7</td>
<td>1.4</td>
</tr>
</tbody>
</table>

—Not available.

Financing and Organization of the Health Sector

Public sector. During this period, the MOH became one of Malaysia’s largest ministries, employing some 84,000 people, more than 10 percent of the civil service work force, and managing a budget of US$1.21 billion, equivalent to 1.22 percent of GDP in 1996. In 1996, total health sector expenditure was estimated at 3.73 percent of GDP, compared with the 5.0 percent recommended for developing countries by the World Health Organization (WHO).4

A pyramidal organizational structure at the national, state, and district levels ensures a hierarchy of accountability and responsibility. Specific responsibilities were delegated to officers at each level of the hierarchy. Technical and nontechnical managerial functions were integrated, and formal lines of communication were established among the three levels.

Private sector. Recent estimates show that the private sector’s role in Malaysia’s health care industry is large and growing. In 1995, the number of private general practitioner clinics was estimated at 5,000 nationwide.5 The number of private hospitals has grown steadily from 50 in 1980 to an estimated 241 today. Most private facilities are urban-based and profit-driven, concentrating on high-return curative care with some preventive care (e.g., immunization against childhood diseases). Since Malaysia does not have a national insurance program, private services are paid for out of pocket or via third-party payment for patients with employment benefits or private medical insurance. The Malaysian Medical Association has established a nonbinding fee schedule for the private sector. The nominal fees in the public sector act as a counterbalance to curb rampant fee escalation in the private sector. Nonetheless, health care costs throughout Malaysia have risen steadily (table 11.2).

Escalating costs are associated with corporate investment and the increasing availability of sophisticated health care services.6 Almost 70 percent of Malaysia’s pharmaceuticals are imported. In 1998, Parliament passed the Private Healthcare Facilities and Services Bill. This comprehensive bill was one of the first explicit regulatory at-
tempts by a developing-country government to introduce checks and balances on the private sector.

The population’s total out-of-pocket health expenditure is estimated at US$1.52 billion (1.53 percent of GDP in 1996). Most of this goes for private treatment (61.6 percent of the total), primarily ambulatory care (62 percent of the total). Spending on hospitalization, the next largest category, amounts to only 15 percent of the total, as 80 percent of all hospitalizations occurs in the highly subsidized government facilities.

**The Underlying Pressures for Reform**

Even before the 1997 Asian economic crisis, the rising cost of health care made reform an important issue. It was feared that unchecked cost escalation in the public sector could jeopardize Malaysia’s impressive accomplishments in providing quality, low-cost health care to all segments of its population. Malaysia hoped to build upon that system by downsizing and corporatizing state-owned hospitals, by encouraging the development of private hospitals and clinics, and by moving basic care from hospitals to local clinics to improve efficiency and reduce subsidies from middle- and upper income citizens.

**Health sector reform.** Policymakers recognized that, to meet the challenges of the 21st century, Malaysia’s health system had to be restructured. Its public and private components had to be integrated.

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>PUBLIC</th>
<th>PRIVATE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midwife clinics/community clinics</td>
<td>1,998</td>
<td>n.a.</td>
<td>1,998</td>
</tr>
<tr>
<td>Rural health centers</td>
<td>609</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Hospitals</td>
<td>123</td>
<td>241</td>
<td>364</td>
</tr>
<tr>
<td>Hospital beds</td>
<td>35,881</td>
<td>8,138</td>
<td>44,019</td>
</tr>
<tr>
<td>Beds (per 1,000 population)</td>
<td>1.7</td>
<td>0.4</td>
<td>2.1</td>
</tr>
</tbody>
</table>

n.a. Not applicable.

into a coordinated system. It was felt that health financing had to be further focused on equity and social objectives. Delivery, whether public or private, had to be decided by service quality and efficiency. The government has long demonstrated a commitment to health sector reform.

**Health financing strategy.** The government recognized that reform of health care financing had to underpin the future health sector. As the biggest provider of health care, the MOH had to play a pivotal role in designing the new system, guiding and being guided by the much-needed restructuring and reorganization of public sector health delivery. It could not afford to lose the initiative to the private sector.

**Health delivery reform.** To meet society’s demands, the government also recognized that the health care delivery system had to be upgraded. The MOH has embarked on selective upgrading of such services as hospital support and bulk distribution of drugs and pharmaceuticals within the MOH through the privatized Government Medical Store. Upgrading the ambulance service through privatization is planned. For medical and nursing care at MOH hospitals, the ministry is emphasizing corporatization rather than privatization in order to maintain public ownership.

**Role of government and health regulation.** The Seventh Malaysia Plan assigned the MOH an enlarged regulatory and enforcement role and a reduced role as a direct provider of health services. Functionally in its new role—protecting consumers and safeguarding the public interest—the MOH was to emphasize regulating prices and tariffs and enforcing service standards and quality.7

**Corporatization and Privatization in the Broader Public Sector**

Discussion regarding corporatization and privatization in Malaysia goes back to the First Outline Perspective Plan (OPPI) for 1971–90, which set the broad socioeconomic framework for achieving the ob-
jectives of Malaysia’s New Economic Policy (NEP). The government implemented NEP by increasing the public sector’s participation in the economy. As a result, public expenditure rose eightfold between the Second and Fourth Five-Year Plans, putting a heavy burden on the government’s financial resources and widening the public sector budget deficit.

Policy adjustments during the 1980s attempted to prevent the deficit from worsening. Hopes were high that greater private sector development would drive economic recovery. Privatization of many government services brought a new dynamism to the economy, improving efficiency. Privatization was also supposed to reduce the public sector’s financial burden by having the private sector take over services traditionally delivered by the public sector. The government adopted the “Malaysia Incorporated” concept in 1983 as a framework for tightening cooperation between the public and the private sectors. The Second Outline Perspective Plan (OPP2) of 1991–2000 continued this strategy by opening new opportunities for the private sector to participate in the country’s economic recovery.

**Corporatization and Privatization in the Health Sector**

The marketizing reforms in the health sector occurred against this socioeconomic backdrop. As mentioned earlier, the private health sector had already been growing, first in cities and large metropolitan areas, then in smaller towns, partly through active encouragement by the government.

In the early 1990s, the private health sector, especially private hospitals, grew rapidly in the main urban areas. At the same time, the government initiated a few projects to corporatize or privatize some aspects of the public health services, in line with the overall policies of the 2020 Vision and Mission for Health and broader economic policy. To date, three major public services have been either privatized or corporatized:

- The government corporatized the newly established National Heart Institute in 1992.
• The Government Medical Store (GMS) was privatized in 1994. The service is now provided by Remedi Pharmaceuticals (M) Sdn. Bhd., a member company of the United Engineers Malaysia Group.

• The government privatized many hospital support services through contracting out, including clinical waste management service, cleaning service, linen and laundry service, facility engineering maintenance service, and biomedical engineering maintenance service. Three different companies, under concessions, began to provide these services in January 1997.

University teaching hospitals were included under the corporatization of tertiary educational institutions. As described in chapter 1 of this volume, corporatization, unlike privatization, is often selected as the reform modality because governments hope to free hospitals of rigid bureaucratic and administrative controls while retaining the ultimate control through public ownership. The idea is to promote responsiveness to communities and patients through the increased flexibility and efficiency of operating within a competitive open market system. These arrangements are expected to enhance quality of care and service while stimulating innovation and creativity. For example, NHI is expected to play a substantial role in driving down the cost of cardiac care, particularly for routine procedures.

**Corporatization of the National Heart Institute**

The National Heart Institute (NHI) is a 286-bed specialized cardiac hospital on a campus of 60,300 square meters. It houses eight wards, an intensive care unit, an intensive coronary care unit, and a 24-hour emergency department with an observation unit. It has four cardiovascular laboratories for invasive and interventional cardiology procedures and five operating theaters for open-heart, closed-heart, and thoracic surgeries. It was intended to be financially self-sustaining in its operation as well as to meet future expansion needs. All support
services are provided at NHI by various departments under the Medical Division.

The hospital provides outpatient treatment for referral patients, pre- and post-operative consultation for cardiothoracic patients, and follow-up on cardiology cases. Outpatients may also come in for noninvasive investigations and consultations. Patients with unstable angina and myocardial infarction are treated as inpatients. Diagnostic and therapeutic invasive procedures are part of the inpatient services. NHI pledges to deliver medical care, conduct research, and provide education in keeping with the highest standards of ethics and quality; to provide comprehensive and compassionate patient care in cardiothoracic medicine; and to excel in attention to patients.

**Structural Reform of NHI**

NHI started operations in July 1992 as part of Hospital Kuala Lumpur and was corporatized on September 1 the same year. As the first public entity in the health sector to be corporatized, prevailing government policies (developed in application to the state-owned enterprise sector) heavily influenced the nature of the objectives, namely: obtaining private sector efficiency gains, tapping private resources, and freeing up the government’s financial resources for other important needs.

Among the many reasons for corporatizing NHI, one notable objective was to improve the retention of highly trained and specialized personnel within the public health care sector. Many doctors, nurses, and paramedics had been leaving for the private sector where working conditions were more attractive and the pay higher. Many of these staff members were initially trained under government scholarships or in highly subsidized public institutions. This exodus of skilled personnel from the public system caused concern about the quality of care offered to patients at government facilities, most of them poor and disadvantaged.

**Legal status and ownership.** During the broader public sector reforms in Malaysia, a public holding company was established under the
Treasury to hold equity in corporatized companies. Upon corporatization, the NHI became one of its holdings.

**Decision rights.** Corporate status gave NHI increased management autonomy in the areas of service delivery, personnel, and procurement. NHI is completely responsible for which services are provided to its customers and how these services are provided.

For example, NHI has more freedom in using its financial resources than noncorporatized public hospitals. The chief executive officer can authorize purchases of medical equipment up to RM50,000 (US$13,000). Purchases between RM50,000 and RM500,000 must be authorized by the Management Committee, and those above RM500,000 (US$131,500) need approval by the Board of Directors. Construction financing must also be endorsed by the Board of Directors. In a public hospital, major expenditures need approval by the MOH and, in some instances, by the Ministry of Finance (MOF). NHI needs MOF permission only for expansion plans or purchases above RM15 million (US$3.8 million).

Heads of the various NHI departments also handle a large amount of autonomy and influence the overall running of the organization. Specialists can develop and implement new plans and strategies for their departments with relative ease. Submission of proposals and ideas for major changes only have to go as far the NHI Board of Directors, which makes decisions fairly quickly.

Other decision rights are still constrained. For example, the Board of Directors has more limited autonomy over human resource decisions such as hiring, firing, and paying workers, including starting salary for new workers. The board must obtain MOF approval to change staff salaries or pay bonuses and dividends, as well as to change any charges or fees.

The MOF, in consultation with the MOH, sets service fees for both public and private paying patients. Patients in third-class wards are charged at cost; those in second- and first-class wards or rooms pay cost plus 5 percent and cost plus 10 percent, respectively. Any revision of this fee schedule is subject to government approval. The MOF approved NHI’s first fee revision, in September 1995, and the
fees were set inclusive of a dividend rate for its shareholders. NHI is in the process of negotiating new fees. Impetus for this effort stems from the MOH, eager to consider packaging more routine procedures on a case-mix or diagnosis-related grouping—evidence of some conflict in their roles as both payer and provider.

**Accountability arrangements.** To exercise oversight over the relatively independent hospital, the reform established a nine-member Board of Directors, comprising senior officials from the Ministries of Finance and Health, the private sector, three representatives from NHI (the chief executive officer and the two executive directors) and the chairman of the board. The MOF appoints board members, with advice from the MOH. Through this arrangement, direct control over service delivery in NHI was removed from the MOH, although it can still influence management of the hospital as one of the representatives on its Board of Directors. Board members need not necessarily have a medical background; they are seen as resource persons to help infuse NHI with a businesslike culture. The board is NHI's final decision-making body.

The Board of Directors recommends the appointment of the chief executive officer (CEO), with MOF approval. The medical, administration, and finance divisions are under the CEO’s direct management. A Management Committee, Audit Committee, and Professional Advisory Committee report to the Board of Directors. Recently, a new post of medical director was created to limit management responsibility of the professional aspects of care, while the CEO concentrates on administration and finance. An external private firm (Ernst & Young) conducts the internal audit.

**Residual claimant status and market exposure.** NHI derives revenue from private and public sources: private patients and private companies paying for their employees as part of their employment benefits; and the government for treating patients who are civil servants and their dependents, government pensioners, and the poor.

The government purchases services from NHI for patients for whom the government assumes responsibility, and the hospital bills
the MOH. The federal government has not assumed responsibility for the health care of employees of statutory bodies and local authorities since May 1995 or, since October 1997, for state government employees. The employers of these three groups pay NHI directly for services provided. NHI has been billing the government on a fee-for-service basis. The growing workload and complexity of cases managed has resulted in steady annual increases in expenditure for these services provided to the government, although recently there seems to be some stabilization in this respect.

**Market environment.** Although NHI controls a large market share, it does not have monopoly power in the markets for most of its services. There are several additional government-owned cardiothoracic centers. These include centers in Johor Bahru Hospital and Penang Hospital, and two centers are planned for the East Malaysia states of Sabah and Sarawak. In addition, some private hospitals offer cardiothoracic care. Nevertheless, NHI does possess monopoly power in some markets as the main center of excellence for more sophisticated and complex services such as cardiac transplants, pediatric cardiac care, and conduction disorders.

**Social functions.** Unlike the other components of the reform, the social functions were only partially dealt with. The NHI continues to be responsible in a general way for ensuring access to poor patients as well as those who can pay. Services to some poor patients are covered via government transfers, but many others must be covered via cross-subsidies from fee-paying patients. Clearly, NHI does not have complete financial control over its affairs like a private entity. Its financial status can swing dramatically depending on the government’s willingness to pay the cost of “social responsibility” services that the hospital provides for the poor. These swings necessitate unplanned-for changes in payment of salaries to its staff, maintenance, as well as service improvements.

Dependence on substantial government financing to pay for services and 100 percent government ownership, therefore, impose certain limitations on NHI’s management autonomy and decision-
making rights. The hospital could reduce its dependence on such government financing by increasing reliance on fee-paying private patients. However, this would not be consistent with its implicit requirements to provide necessary care to all segments of the population, irrespective of socioeconomic status. The absence of a national health financing mechanism covering the whole population means that the NHI remains dependent on direct government subsidies and cross-subsidies to cover its social responsibilities. By reducing the overall financial control and management autonomy over its corporate affairs, the financing mechanisms undermine the impact of the reform.

The corporatization of NHI was initially intended as a pilot for similar reforms in other parts of the health sector. But the Treasury recognized that, until a new health-financing system is in place, corporatization of other health institutions had to proceed cautiously so as not to undermine the social protection for the poor, provided by directly operated health facilities.

**Issues Arising during Implementation**

A number of issues encountered during the corporatization of NHI in Malaysia are worth highlighting.

*Decision rights over human resource issues.* Although the hospital itself was newly established in 1992, the staff was to come from the cardiology and cardiothoracic units of Kuala Lumpur General Hospital. The transfer of civil servants to the corporatized hospital was problematic. Staff, especially the more senior members, worried about their service benefits (e.g., pensions and gratuities) after leaving government service to join NHI. To ensure that NHI would have enough workers to start its service while observing the rights enshrined in civil service legislation, the government developed a package of options for the relevant staff. Government employees were given three options: Option A—resign from government service by taking early retirement and joining NHI; Option B—be seconded to NHI for two years while retaining civil service benefits; or Option
C—reject the offer to join as NHI staff and remain in the civil service.

In September 1992, of the 315 staff members offered the three options, 298 selected Option A; 1 chose Option B, and 16 preferred Option C. Thus, 95 percent of the staff opted to join NHI, mainly because NHI’s salaries were higher than government’s and, after a short probationary period, job security was good. The new jobs also offered retirement benefits at age 55, the pension depending on years of service years with NHI. Of NHI’s initial staff of 299, 13 were doctors. An active recruitment program during the first year of operations nearly doubled the staff to 459 by the end of 1993. Recently, there has been a move to hire employees on renewable contracts to increase flexibility in managing human resources.

A key challenge encountered during the reform was to change management culture from that of a government civil service to that of an efficient corporation. The staff had to shed the civil servant image, often perceived as inefficient and unfriendly, and learn to work in a dynamic, consumer-sensitive environment. Another challenge was to ensure that health staff and specialists remain in NHI and not leave for the more lucrative private sector. NHI met this challenge by improving pay and work conditions compared with other public hospitals. Since November 1996, a small professional fee has been levied on private paying patients in first- and second-class wards. These fees are pooled and divided equally among doctors of the same specialty. Clinicians are also given opportunities for specialized training. Such human resource policies have not only succeeded in retaining the workers in NHI but also in increasing the total number of staff—by 30 percent between 1992–93 and 1996–97.

Changing the scope of services and utilization patterns. Over the five-year period examined, invasive and noninvasive cardiology procedures increased by 78.2 percent and 111.4 percent, respectively. Of the 10,750 cardiothoracic surgeries performed at NHI, 68.8 percent were open-heart and 27.4 percent closed-heart surgeries; the rest were thoracic surgeries. The most common noninvasive cardiology procedures were echocardiography and electrocardiography, to-
Corporatization of a Single Facility    •    439
gether accounting for 75.3 percent of all noninvasive procedures. Coronary angiography was the main invasive cardiology procedure done in NHI; nearly half of the workload was associated with this procedure. Coronary artery bypass was the most common open-heart surgical procedure, and most closed-heart surgeries were carried out for patent ductus arteriosus. In 1997, NHI started the country’s only heart transplant program, and the first human heart transplant was performed on December 18, 1997.

The number of patients using NHI’s services also increased steadily (table 11.3) during the same five-year period. The number of outpatient visits increased by 57.9 percent, and the number of admissions and patient-days increased by 62.5 percent and 38.6 percent, respectively. NHI functioned with 207 beds until 1996 when 4 intensive care unit (ICU) beds were added. In 1998, the bed complement increased with the addition of 26 beds in first class and 2 pediatric ICU beds. Even with more beds available, the increasing patient load resulted in a higher bed occupancy rate (from 58 percent in 1992–93 to 76 percent in 1995–96). The mean length of stay was cut by more than a day (from 7.9 to 6.8 days). These results are even more impressive, considering that the case mix changed, with more sophisticated procedures performed.

Changes in patient funding profiles. Patients treated in NHI fall into three groups, based on source of financing: civil servants and their dependents or pensioners; low-income patients; and private patients. The government pays medical bills for the first two groups. Patients

<table>
<thead>
<tr>
<th>FISCAL YEAR</th>
<th>NUMBER OF BEDS</th>
<th>BED OCCUPANCY RATE [PERCENT]</th>
<th>AVERAGE LENGTH OF STAY [DAYS]</th>
<th>NUMBER OF PATIENT-DAYS</th>
<th>NUMBER OF ADMISSIONS</th>
<th>NUMBER OF OUTPATIENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992–93</td>
<td>207</td>
<td>58.2</td>
<td>8.0</td>
<td>39,548</td>
<td>4,982</td>
<td>35,611</td>
</tr>
<tr>
<td>1993–94</td>
<td>207</td>
<td>61.9</td>
<td>7.6</td>
<td>46,151</td>
<td>6,125</td>
<td>39,265</td>
</tr>
<tr>
<td>1994–95</td>
<td>207</td>
<td>70.9</td>
<td>6.9</td>
<td>53,475</td>
<td>7,797</td>
<td>45,312</td>
</tr>
<tr>
<td>1995–96</td>
<td>207</td>
<td>75.6</td>
<td>7.1</td>
<td>57,255</td>
<td>8,081</td>
<td>50,442</td>
</tr>
<tr>
<td>1996–97</td>
<td>211</td>
<td>71.9</td>
<td>6.8</td>
<td>54,846</td>
<td>8,098</td>
<td>56,262</td>
</tr>
</tbody>
</table>

Table 11.3 Operating Statistics for the National Heart Institute, 1993–97

Source: National Heart Institute.
who cannot afford to pay are certified as poor by medical social workers. For example, when NHI began operations in 1992–93, 81.4 percent of inpatients discharged were government-sponsored, and only 18.6 percent were private patients. Over the five-year period, the proportion of private patients increased to 30.2 percent. The same trend is observed for outpatient attendance. The proportion of the poor using inpatient and outpatient services decreased 7.8 percent and 6.5 percent, respectively, and use by private patients increased 11.6 percent and 9 percent, respectively.

The decrease in the number of civil servants and poor using services has raised concerns that corporatization has led NHI to scrimp on its social responsibilities. However, a more thorough examination leads to an ambiguous conclusion. First, in 1995 the central government stopped sponsoring employees working in local authorities and statutory bodies as well as all school-age children. While subordinate bodies are now responsible for these costs, it is not clear that their financing is as reliable—which may account for some of the decrease in demand for NHI services. Second, since 1995, two new MOH cardiothoracic units have undoubtedly taken some government-sponsored patients away from NHI. Third, the MOH now carries out more stringent audit checks to ensure that all necessary documentation is submitted before making payment for the poor. Because of these stringent checks, some of patients whose bills are submitted by NHI as poor patients are held back until full documentation is available.

*Lack of hard budget constraints.* Although service charges are based on a government-approved costing formula, the open-ended, fee-for-service billing arrangement has been financially advantageous to NHI. However, whether the unit cost applied is measured optimally is questionable. Its salary structure, lower than in private hospitals, allows NHI to remain competitive by offering services for many procedures for less than private hospitals.

Partially as a result of these factors, operating revenue increased 108 percent, from RM41.7 million in 1992–93 to RM86.8 million in 1996–97 (table 11.4). Most of the increase in income came from

The sharp increase in the government’s contribution has led to a criticism that allowing NHI to claim whatever expenses it incurred for public-sponsored patients does not encourage efficiency. Some of the increase, however, is from an expanded workload. Over the five-year period examined, the workload for outpatient and inpatient services grew by 58 percent and 63.9 percent, respectively.

In the future, NHI may lose its competitive edge if it does not move toward bundling services and charging fees for service packages, particularly when competing for contracts with large funders such as governments, managed-care organizations, or large companies paying for their employees. Such packages are being offered by a private facility in Sarawak. Furthermore, balancing the bottom line with NHI’s social responsibilities has not been easy. Clients have in the past been billed only after interventions were carried out. As a result of private patients’ reneging on their obligations, NHI has incurred a cumulative debt of RM11 million. Management is now attempting to recover some of these outstanding debts, and private patients are being asked to pay a deposit on admission or produce a guarantee letter from their employers.

Table 11.4 National Heart Institute Operating Revenue, by Source of Financing, 1993–97

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Civil Servants and Dependents (Percent)</th>
<th>Poor (Percent)</th>
<th>Private Paying (Percent)</th>
<th>Total (Millions of Ringgit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992–93</td>
<td>49.6</td>
<td>25.5</td>
<td>24.9</td>
<td>41.7</td>
</tr>
<tr>
<td>1993–94</td>
<td>54.6</td>
<td>25.6</td>
<td>19.8</td>
<td>59.0</td>
</tr>
<tr>
<td>1994–95</td>
<td>55.3</td>
<td>25.7</td>
<td>19.0</td>
<td>76.9</td>
</tr>
<tr>
<td>1995–96</td>
<td>53.0</td>
<td>26.9</td>
<td>20.1</td>
<td>77.0</td>
</tr>
<tr>
<td>1996–97</td>
<td>51.4</td>
<td>24.2</td>
<td>24.4</td>
<td>86.8</td>
</tr>
</tbody>
</table>

Source: National Heart Institute.
Operating expenses increased from RM30.8 million in 1992–93 to RM77.3 million in 1996–97. Manpower and supplies were the major expense items throughout the five-year period; the proportion of expenses for manpower remains almost constant while expenses for supplies increased from 28.6 percent to 40.1 percent (table 11.5). The increase in expenditures for supplies is attributed to an increase in the range and intensity of specialized procedures being conducted by specialists who are returning from overseas training with greater expertise and a desire to undertake more aggressive and invasive cardiology procedures and pediatric cardiac surgery.

**Unclear residual claimant status over capital investments.** Capital investment is still borne by the government: building the hospital cost RM151 million (US$39 million), and the government allocated RM15 million the first year to start the operation. Since then, NHI has been self-financing with payments from both private patients and the government to cover government-sponsored patients. Every year operating revenue has exceeded operating expenditures.

Annually, NHI is expected to pay a minimum of 10 percent of the invested share capital as a dividend to the Ministry of Finance. The MOF derives the invested share capital of RM71.6 million from the

<table>
<thead>
<tr>
<th>FISCAL YEAR</th>
<th>STAFF</th>
<th>SUPPLIES</th>
<th>DEPRECIATION</th>
<th>MAINTENANCE/REPAIRS</th>
<th>UTILITIES/COMMUNICATIONS</th>
<th>OTHER</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992–93</td>
<td>[37.0]</td>
<td>[28.6]</td>
<td>[20.1]</td>
<td>[1.3]</td>
<td>[4.9]</td>
<td>[8.1]</td>
<td>30.8</td>
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<tr>
<td>1993–94</td>
<td>[40.1]</td>
<td>[32.6]</td>
<td>[15.8]</td>
<td>[1.7]</td>
<td>[3.9]</td>
<td>[5.8]</td>
<td>41.1</td>
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<tr>
<td>1994–95</td>
<td>[38.8]</td>
<td>[35.5]</td>
<td>[12.8]</td>
<td>[4.0]</td>
<td>[3.1]</td>
<td>[5.8]</td>
<td>57.2</td>
</tr>
<tr>
<td>1995–96</td>
<td>[37.8]</td>
<td>[37.4]</td>
<td>[11.2]</td>
<td>[3.9]</td>
<td>[2.9]</td>
<td>[6.8]</td>
<td>64.9</td>
</tr>
<tr>
<td>1996–97</td>
<td>[38.0]</td>
<td>[40.1]</td>
<td>[10.0]</td>
<td>[4.0]</td>
<td>[2.6]</td>
<td>[5.3]</td>
<td>77.3</td>
</tr>
</tbody>
</table>

RM Malaysian ringgit.

Source: National Heart Institute.
RM52.7 million of fixed assets, the RM15 million launching capital, and the additional working capital of RM3.9 million. The building and land remain in government ownership. At the end of the 1997 fiscal year, the MOF had recouped about 30 percent of its invested share capital. No decision has been made on what to do when the original investment is paid back fully. Profits are subject to a 28 percent tax.

Assessment of Impact

Since its corporatization on September 1, 1992, no formal evaluation has been carried out to assess the impact of this organizational reform in delivering health services in Malaysia. Yet a better understanding about the positive and negative aspects of this type of reform could provide an important basis for further similar reforms of health services in the public sector. The following provides a first attempt at such an evaluation for NHI’s managerial performance, financial results, and clinical outcomes. It could form the basis for more in-depth analysis in the future.

Efficiency Gains

A number of efficiency and productivity gains that can be documented during NHI’s first five years of operations under a corporate model can be attributed to the reform process (tables 11.6 and 11.7). As acknowledged by the Malaysian director-general of health, similar changes and progress would not have been achieved had NHI remained in its original budgetary form. For ease of presentation, these efficiency gains are presented using a structure-process-output framework (table 11.7).

The ratio of revenue to expenditure is decreasing, suggesting that NHI may be providing more services at cost and striving to remain a competitive player in an open market (table 11.8). During the first fee revision, most fees were lowered. The Privatization and Corporatization Sector of the Economic Planning Unit (EPU) is of the opinion that NHI has become a benchmark for other facilities offering
Table 11.6  National Heart Institute Performance Indicators, 1993–97 (annual percentage change)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>STAFF</th>
<th>BED OCCUPANCY</th>
<th>AVERAGE RATE</th>
<th>PATIENT LENGTH OF STAY</th>
<th>OUTPATIENT-DAYS</th>
<th>VISITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>8.1</td>
<td>22.9</td>
<td>6.4</td>
<td>-5.1</td>
<td>16.7</td>
<td>10.3</td>
</tr>
<tr>
<td>1995</td>
<td>8.7</td>
<td>27.3</td>
<td>14.5</td>
<td>-9.3</td>
<td>15.9</td>
<td>15.4</td>
</tr>
<tr>
<td>1996</td>
<td>4.1</td>
<td>3.6</td>
<td>6.6</td>
<td>+4.4</td>
<td>7.1</td>
<td>11.3</td>
</tr>
<tr>
<td>1997</td>
<td>5.7</td>
<td>0.2</td>
<td>-4.9</td>
<td>-4.2</td>
<td>-4.2</td>
<td>11.5</td>
</tr>
</tbody>
</table>

Source: National Heart Institute.

Table 11.7  National Heart Institute’s Efficiency and Productivity Gains from Corporatization

- Governance by Board of Directors; chief executive officer recommended by board
- Internal auditing performed by an external private accounting firm
- Increased decision-making rights

- Decision-making power over personnel matters
- Authority to do own procurement of equipment and supplies
- Authority to renovate and expand physical plant
- Authority to retain all fees collected

- More sophisticated clinical services provided; new technologies and techniques available more quickly under own decisionmaking authority and resources
- Higher hospital bed occupancy rate and lower average length of stay; more efficient use of physical infrastructure
- Increased revenue per patient/day
- Constant number of staff but more patients treated, using more difficult procedures

Table 11.8  Total Revenue and Expenses per Inpatient-Day, 1993–97

<table>
<thead>
<tr>
<th>YEAR</th>
<th>REVENUE (RM)</th>
<th>EXPENSES (RM)</th>
<th>RATIO REVENUE/EXPENSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>1,054</td>
<td>779</td>
<td>1.35</td>
</tr>
<tr>
<td>1994</td>
<td>1,278</td>
<td>890</td>
<td>1.44</td>
</tr>
<tr>
<td>1995</td>
<td>1,438</td>
<td>1,070</td>
<td>1.34</td>
</tr>
<tr>
<td>1996</td>
<td>1,345</td>
<td>1,134</td>
<td>1.19</td>
</tr>
<tr>
<td>1997</td>
<td>1,583</td>
<td>1,409</td>
<td>1.12</td>
</tr>
</tbody>
</table>

RM Malaysian ringgit.
Source: National Heart Institute.
similar services in the market and has decelerated the hitherto unchecked rapid rise in cardiac care fees.

Revenue collected from private patients (25 percent of total revenue) is much higher than the corresponding rate in the traditional public hospitals (5 to 10 percent of the operating budget at a government hospital; 5 percent of the total recurrent MOH budget). Patients refuse to pay fees in a public hospital because of the tradition of free care in a public institution. The increased emphasis on collecting fees by NHI seems to have broken that connection in people’s minds, sending a message to the public that payment for services is expected and required for population groups not covered by subsidies.

Since the regional economic crisis started, many private hospitals have had fewer patients and substantial losses. NHI has been relatively spared from this drop in revenues partly because it is a highly specialized, tertiary care institution, with much of its work based on referral of complicated cases from all over the country.

Equity Goals

The Malaysian culture stresses equity of access to health care and education. For this reason, the impact of the reforms on poverty is monitored closely and continually to ensure that no needy patient is refused services from NHI. A Patient Assessment Unit, housed within NHI and staffed by MOH personnel, evaluates the socioeconomic status of patients requesting government financial assistance. Though not strictly adhered to, guidelines have been established by the MOH for the number of poor who have to be allowed admission to the various ward classes. Reductions in the percentage of poor patients receiving care have to be explained.

Despite these guidelines, the number of poor patients treated by NHI, both as inpatients and outpatients, decreased over the five-year period following the reform. But the amount of money paid by the government for treating poor patients remained stable for the same time period (table 11.4). This may indicate that more complicated and more critical cases are being treated at NHI, while others go to
hospitals closer to the patients’ residence (NHI has trained staff from hospitals in other parts of the country in cardiology and cardiothoracic procedures).

In the long run, out-of-pocket payment for critical care such as that provided by NHI is not a sustainable or socially desirable system. Corporatization reforms of tertiary care facilities such as that in Malaysia therefore need to be accompanied by parallel funding reforms such as the introduction of a more comprehensive national health insurance (see chapter 1, this volume).

Quality

There has been no detailed assessment of the impact of the reforms on the quality of patient care provided by NHI. Ongoing consumer satisfaction studies by in-house staff members indicate a high satisfaction rate among patients, but the NHI managers feel that the study has limitations as guidance for quality-improvement efforts. A new patient-satisfaction questionnaire is being used and monitored by NHI’s Quality Assurance Unit. The unit also monitors 12 quality assurance indicators, including such measures as outpatient waiting time and mortality. Despite indications that NHI specialists would like to assess the clinical outcomes of their services in greater depth, no such efforts have yet been undertaken. But NHI’s Quality Council plans to initiate medical and third-party audits.

Conclusions

During the first years after corporatization, NHI has achieved its basic objectives: providing services to manage major heart conditions in Malaysia and substantially reducing dependence on foreign heart centers. The case-mix and socioeconomic background of patients indicates that the hospital has succeeded in balancing its role as a corporatized hospital with its social obligations.

During these crucial initial years, NHI has become the main provider of cardiovascular services in Malaysia. Its corporatized sta-
tus has enabled it to position itself within a relatively short period as a leading national and international medical care center. This status has allowed it to attract and retain dedicated and experienced productive health care workers. It is developing alliances with other hospitals to “export” staff expertise, both nationally and internationally. Similarly, both NHI and the government plan to actively promote the hospital to attract more clientele from neighboring countries. The hospital already receives patients from Brunei, Singapore, and Indonesia.

To be truly self-sustaining, the hospital cannot continue to rely only on the limited funding provided by government subsidies for lower income patients. The perception is that the current 70–30 ratio of government-sponsored to private patients should increase to a 50–50 ratio. Achieving this ratio without adverse effects on equity will depend on the parallel introduction of more comprehensive health insurance.

NHI is clearly using its flexibility to expand the scope and increase the quality of the operations. It is undertaking additional research and training. For example, it has already increased its role in research by conducting clinical trials. Staff members are also encouraged to engage in operational research related to clinical management and organizational aspects of health services and to strengthen their visibility and reputation by publishing this work and participating in conferences and other training events. To help fund these activities, a foundation has been set up to manage donations from charitable organizations and individuals. Moreover, NHI has established links with such internationally renowned heart centers as the Mayo Clinic to stimulate collaborative research.

In the case of training, NHI has initially concentrated on its own staff and some staff from other public university teaching hospitals and two private facilities. The hospital trains not only specialists but also paramedics such as their own nurses.

In meeting its social obligations, NHI has initiated and financed a Heart Transplant Fund to provide assistance to needy patients who become transplant recipients. It is also working with the Malaysian
Heart Foundation (Yayasan Jantung Malaysia) in an “Adopt a Heart Transplant Patient” campaign to help transplant recipients with the high cost of their medical care.

Acknowledgments: The authors would like to gratefully acknowledge the following individuals for their invaluable contribution to this case study: Tan Sri Dato’ Dr. Abu Bakar Suleiman, director-general of health, Malaysia; Dato’ Dr. Nor’aini bt Abu Bakar, CEO, National Heart Institute (NHI); Dato’ Dr. Yahya Awang, head of the Cardiothoracic Department, NHI; Dato’ Dr. Robayaah Zambahari, head of the Cardiology Department, NHI; Mr. Jamal Salimin, deputy secretary-general of health (finance), MOH; Ms. Khor Lee Hian, Finance Division Manager, NHI; Mr. Noordin Mohd. Idrus, Human Resource Manager, NHI; Mr. Yusof Abd. Rahman, Economic Planning Unit (Privatisation and Corporatization Sector), Prime Minister’s Department. The authors also thank Suzanne McLees of Bethesda, Maryland, for her assistance with this chapter.

Notes


2. The top five killers are cardiovascular ailments (20 percent), cancer (10 percent), cerebrovascular disorders (7.8 percent), motor vehicle accidents (6.5 percent), and septicemia (6.3 percent), according to the Ministry of Health (MOH) Annual Report, 1996.

3. Nearly 23,000 cases of HIV infection were recorded by the MOH between 1986 and September 1997.


5. A. B. Suleiman, “The Approach of the Ministry of Health in Malaysia in Further Upgrading Quality in Health Services” (paper delivered at EDI/UNFPA/ICOMP/World Bank Seminar on Quality of Reproductive Health Care as the Way Forward, Kuching, Malaysia, November 14–17, 1995).


8. Dato’ Dr. Nor’aini bt Abu Bakar has managed NHI since its inception, and her initial three-year contract has been renewed twice. A physician with a postgraduate degree in hospital administration, she served as a hospital director in Johor Bahru Hospital.

CHAPTER 12

Attacking Hospital Performance on Two Fronts: Network Corporatization and Financing Reforms in Singapore

Kai Hong Phua

From 1985 through 1998, Singapore implemented a far-reaching reform to many of its public hospitals. This reform followed closely the reform modality characterized in this volume as corporatization. The reform was undertaken in conjunction with equally extensive reforms to the hospital financing system. Singapore's ability to tackle organizational reform on two fronts was enabled by the high capacity of its public administration, as well as a political system that is relatively conducive to structural reforms.

The hospital reforms are seen as relatively successful and are interesting on their own. However, it is not possible to analyze them separately from the financing reforms. This chapter therefore reviews the reforms together, distinguishing where possible the likely source of positive results.
Context and Background

Singapore’s 24 hospitals have a total of 10,500 hospital beds, a ratio of 3.5 beds per 1,000 population. Eighty percent of those beds are in public hospitals whose bed complements range from about 200 beds to 2,500 beds. Most private hospitals are small, with 60 to 500 beds each.

Public hospitals set the standard for medical care and hospital charges. Of the public hospitals, five are acute care general hospitals. The others specialize in areas such as obstetrics and gynecology, psychiatry, and infectious diseases. The public general hospitals provide multidisciplinary inpatient and specialist outpatient services and a 24-hour accident and emergency service. There are also specialist institutes for cancer, heart, eye, and skin diseases and the neurosciences. Tertiary specialist care (cardiology, renal medicine, hematology, neurology, oncology, radiotherapy, plastic and reconstructive surgery, pediatric surgery, neurosurgery, cardiothoracic, and transplant surgery) is centralized in two of the larger general hospitals, the Singapore General Hospital (SGH) and the National University Hospital (NUH). Private hospitals have similar specialist disciplines and comparable facilities. The government has also introduced low-cost community hospitals for intermediate health care for the convalescent sick and aged who do not require the more expensive care of the acute care general hospitals.

As in many East Asian health systems, Singaporean public hospitals operate an internal system of cross-subsidization via tiered pricing. Individuals admitted to public hospitals choose their level of accommodations and, in so doing, a price regime. The more amenities they want, the more they pay. Thirty percent of the accommodations are private (one-bed) or semiprivate (four-bed) rooms, the most expensive. These patients thus subsidize the remaining patients, who pay much reduced prices. Medical care in public hospitals is similar for all types of accommodations. With an average occupancy rate of about 80 percent, the available beds are well utilized.
In 1982, the government embarked on a plan to restructure the health care system in Singapore, principally through an alternative financing method, based on the Central Provident Fund (CPF) concept of compulsory savings (box 12.1). The idea of using CPF savings for medical care had been mooted in the 1970s when the government was looking at various options to finance the increasing costs of public services. Not until the appointment of a new minister for health in 1981, however, did the policy take shape in the form of a major national health planning exercise.

The National Health Plan

The National Health Plan (NHP), established in February 1983, introduced Medisave, a compulsory saving plan for medical coverage. The intent of the NHP was to change the direction of the Singapore system and avoid the pitfalls and problems of comprehensive health care systems elsewhere. The declared objectives of the NHP were:

- To secure a healthy, fit, and productive population through active disease prevention and promotion of healthy lifestyles
- To improve the health system’s cost-efficiency
- To meet a rapidly aging population’s growing demand for health care.3

The rationale for the NHP was that Singapore’s health care system must “stand the test of time as the demand for hospital care will go up while the anticipated tax revenue may be expected to go down in relative terms.”

The solution was seen to lie in a personal savings plan like Medisave, with its philosophy of rewarding individuals for staying well. The plan also detached the quality of the health care system from complete dependence on the tax base, and hence from the vagaries of economic cycles. These objectives were consistent with traditional
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982 March</td>
<td>Medisave plan announced to Parliament by Minister of Health.</td>
</tr>
<tr>
<td>1983 February</td>
<td>Blue Paper on the National Health Plan released.</td>
</tr>
<tr>
<td>August</td>
<td>Medisave approved by Parliament.</td>
</tr>
<tr>
<td>1984 April 1</td>
<td>Medisave implemented in every government hospital.</td>
</tr>
<tr>
<td>May</td>
<td>Plan to restructure the governance of government hospitals announced.</td>
</tr>
<tr>
<td>1985 June</td>
<td>New National University Hospital (NUH) incorporated as a subsidiary company under a government-owned holding company. Medisave introduced as a pilot in the first restructured government hospital NUH.</td>
</tr>
<tr>
<td>1986 January 1</td>
<td>Medisave expanded to include approved private hospitals.</td>
</tr>
<tr>
<td>1987 April</td>
<td>Health Corporation of Singapore (HCS) formed to manage all restructured government hospitals.</td>
</tr>
<tr>
<td>1990 July 1</td>
<td>Medishield, a catastrophic insurance plan, implemented.</td>
</tr>
<tr>
<td>1992 January</td>
<td>Parliament passed the Medical Endowment Act to introduce Medifund.</td>
</tr>
<tr>
<td>February</td>
<td>Report of Review Committee on National Health Policies accepted by government; Ministerial Committee on Health Policies formed to implement recommendations.</td>
</tr>
<tr>
<td>1993 April 1</td>
<td>Medifund, a health care plan for the poor, implemented.</td>
</tr>
</tbody>
</table>
Singaporean values of self-reliance and strong family ties, promoted as the primary support for care of the sick and aged. Two common sayings in Singapore encapsulate these values—“Save for a rainy day” and “Charity begins at home.”

Medisave accounts, as they finally evolved, allow holders to withdraw money to pay their own and their family members’ hospitalization costs, within certain limits. This additional source of funds was to enable increased private payment for individuals and their families. Medisave has, in effect, become an efficient and convenient method for collecting hospital bills. As prices rise to reflect increasing costs, it could also recover the costs of major development projects in restructuring the government health sector.

Individuals are encouraged to take responsibility for their own health by saving for expected future medical expenses. To reinforce this sense of personal responsibility, the health care system is built upon three health care financing programs that help people pay for medical expenses: Medisave, Medishield, and Medifund. These three programs, discussed in more detail below, were designed to create a largely self-funded health care system, requiring people to look first to personal and family resources for health care and to rely on the government only after depleting their own resources.

**Medical Savings**

Singapore’s health care financing reforms developed in three stages: Medisave, the medical savings component, came first (1984); then Medishield, a catastrophic insurance plan (1990); and Medifund, a medical endowment plan for the poor (1993).

**Medisave.** Employees and employers each contribute 20 percent of the employee’s wages to the Central Provident Fund, a national social security and pension fund based on savings. From these funds, 6 percent of the employee’s wages is deposited each year into the employee’s Medisave account until age 34. The percentage deposited increases to 7 percent between ages 35 and 44 and 8 percent at age 45 until retirement or until savings reach the ceiling of S$20,000 (1998 dollars).
Medisave has been modified several times, based on the experience acquired. Initially, account holders could use their Medisave accounts to pay the full charges of a hospital stay in lower priced wards but only partial charges for the more expensive rooms. Now, almost all categories of hospital charges are covered, but within maximum daily limits and with the proviso that Medisave accounts used for higher priced rooms may not be overdrawn.

Medishield. While Medisave account balances will usually cover hospital expenses, they are not sufficient to cover catastrophic expenditures. These events require risk pooling across individuals, that is, health insurance. Medishield provides this insurance. Premiums are automatically deducted from Medisave, unless account holders request otherwise. Reaching the threshold for catastrophic coverage usually entails a long hospital stay or one of several costly, ongoing outpatient treatments such as chemotherapy for cancer. Three different Medishield programs offer different levels of coverage, based on deductible or excess per policy year, claim limits per policy year, and claim limits per lifetime.

Medifund. Though established by government endowment, Medifund is also based on the saving concept. Hospitals receive grants to defray needy patients’ hospital bills from the interest on sums of money that the government provides from budget surpluses. Sufficient funds have built up from the substantial capital endowment since the principal sum is untouched. Requests for assistance are considered on a case-by-case, basis, and “low-wage Medisave/Medishield contributors and elderly persons whose accounts are not adequate to cover expenses” receive preference.6

Singapore’s experience represents a successful experiment in the development of medical saving accounts. Despite continually rising costs and demand, unnecessary expenditures for inpatient care have been reduced without dramatic limits on physicians’ incomes or on access to high-technology treatment. However, Singapore uses a fairly narrow definition of services eligible for Medisave expendi-
eatures (e.g., excluding most outpatient care), has a fixed fee schedule for medical services, and does not have universal insurance. However, universal access is guaranteed through a system of targeted subsidies and subventions from tax-based sources as well as the last-resort Medifund endowment for the indigent. While the medical saving accounts are a critical component of the Singapore health system, it is not the sole mechanism for financing care, nor is it viewed as the entire solution to all health policy problems.

In Singapore, the reform model was selected to avoid the problems associated with welfare-state, tax-financed systems by distributing the burden of financing among individuals, families, and employers and by promoting involvement of the voluntary and private sectors. The strategy taken was to increase user costs by raising fees and to separate the provision of hospital services and financing from its usual identification with government services.

**Hospital Reform**

The changes to the financing system enabled the hospital reforms Singapore launched in 1985. The primary goals of the reforms were to raise efficiency and service standards, improve productivity and cost control, and give management flexibility to respond quickly to changing needs. In keeping with the reform trends in the wider economy of privatization and market liberalization, Singapore opted to address the problems in its public hospital sector with marketizing organizational reforms, in particular, the corporatization model. These reforms were applied to five acute care hospitals and six specialist institutes. To increase management’s financial discipline and accountability, commercial accounting systems were also introduced. Prices have been raised periodically to differentiate the quality of “hotel services” in the higher priced wards.

In May 1984, the Ministry of Health announced a plan to reform the governance of public hospitals to give them greater autonomy in running their own affairs. It was hoped that the reforms would encourage efficiency, higher standards, and competition among hospitals, and hence improve services. Policymakers believed that man-
agement autonomy would allow flexibility to innovate and to motivate, and improved working conditions would inspire higher productivity and a more personalized service to patients.

The pilot. Policymakers decided to first pilot the model in the new hospital at Kent Ridge. If the reform succeeded, the new governance model would then be extended to the Singapore General Hospital and later to other government hospitals. The Kent Ridge Hospital was renamed and incorporated as University Hospital (Pte) Ltd, a subsidiary company of Temasek Holdings (a government-owned holding company), with a Board of Directors chaired by the permanent secretary/director of Medical Services of the Ministry of Health. The company was “to make the University Hospital the hospital of choice in Singapore” and “to provide excellent medical care, at the lowest possible cost to the patient.” It would be run as an autonomous company “to give it maximum flexibility to introduce innovative and cost-effective management systems and to motivate and retain good staff.” To fulfill its community responsibility of providing medical care for the poor, it was allocated an annual subsidy from the Ministry of Finance to offset the operating deficit from subsidized care. The reform model was viewed as a success—as applied to the newly completed National University Hospital from June 1985.

Health Corporation of Singapore. It was decided to roll out the reform to cover additional hospitals. However, rather than reforming individual hospitals, it was decided to apply the new governance model to them as a group or network. To this end, in 1987, a new government-owned structure, the Health Corporation of Singapore (HCS) was established, and the NUH (Pte) Ltd was placed under its control. In December 1988, the National Skin Centre was integrated into the HCS, followed by the Singapore General Hospital in April 1989; Kandang Kerbau Hospital and Toa Payoh Hospital in April 1990; and Tan Tock Seng Hospital in April 1991. The HCS functioned as a vehicle to acquire and manage all reformed government
hospitals. Legally, it was incorporated as a holding company with the hospitals and specialist institutions as its subsidiaries.

The Health Corporation of Singapore became the largest health care provider in Singapore. It has 5,000 hospital beds (45 percent), more than 12,000 employees, and 200,000 admissions (50 percent) annually. Its listed business is to provide health care services through hospitals and specialist centers and to conduct education and research. As a holding company, it is governed by private law. However, it is wholly owned by the government of Singapore and responsible to the Ministry of Health. A Board of Directors, consisting of top government appointees and all the chairmen of its subsidiary companies, provides policy 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.”

The reform model is described below, according to the framework elaborated in chapter 1.

**Decision rights.** Reformed hospitals received extensive decision rights, including the right to recruit staff, set terms of remuneration, and decide on the deployment of labor and other resources. They also have the right to set some service prices. As noted above, the hospitals were established as private companies, which makes the transfer of decision rights irreversible without a complete reorganization.

**Residual claims.** Reformed hospitals are formally the full residual claimants on their budgets. However, the linkage of the continued government subsidy to the level of operating deficits reduces the extent of these claims. Over time, the subsidy has decreased, moving the hospitals closer to full residual claimant status.

**Market exposure.** Increased prices and cost recovery were a central component of the reform model. These increases, combined with the decreasing government subsidy, heightened market exposure significantly throughout the period of the reforms. Cost-recovery increases
have generated a shift from about 15 percent before the reforms to more than 55 percent of hospital recurrent expenditure. The accumulation of mandatory savings under the Medisave scheme has enabled these price increases and the related shift to private payment.

**Accountability.** A Board of Directors was established to enable the government to indirectly hold the HCS accountable. The HCS management is accountable only to the Board of Directors for performance. The HCS mission is set by the Ministry of Health. The HCS continues to be subject to broad policy guidance by the government through the Ministry of Health.

**Social functions.** Following the reforms, delivery of social functions by hospitals was ensured via a combination of mechanisms. The system of internal cross-subsidization from high-paying (Class A and B) patients to low-paying patients (Class C) was continued. This system was altered in several ways, however. Service prices were increased, so even subsidized prices for poor (Class C) patients increased. The government established a ceiling, however, to constrain these increases. Hospitals continue to receive an annual subsidy from the government that is notionally linked to continuation of care for poor patients (though it is set relative to the operating deficit). In 1993, the establishment of Medifund, which makes payments to defray hospital bills for needy patients, made funding for social functions more explicit.

While social functions have been more clearly delineated, there is no transfer tied to delivery of specific services. The funding system has effectively made funding for these services more explicit, in that they are increasingly paid for privately, with some support to needy patients.

**Political Economy**

There were serious concerns among the population and other stakeholders about the reforms. Because of widespread privatization in other sectors, there was much confusion and concern in Singapore.
about whether the corporatization model that was applied to the hospitals constituted privatization. Beneath the terminology, people clearly worried that the reforms reduced the scope of state responsibility. Besides consumers reacting to planned price increases, many health professionals and administrators believed the reforms would reduce their influence and control over health services, which they naturally opposed. Price regulation alleviated public fears, though policymakers viewed it as a stopgap policy, pending the development of a more stable and competitive market. Guarantees of appropriate opportunities and incentives in the new entity for an extended grace period reduced workers’ resistance.

These steps were taken in extending the reforms to the other government hospitals after the National University Hospital pilot. In announcing the reform of the Singapore General Hospital, the health minister attempted to buttress the case for the reforms by stating that the government hoped that “freeing the hospital from bureaucratic red tape would lead to better quality medical sources at economical rates.” The government also expected the reforms to bring about more responsive services and to constrain further cost escalation. The minister also assured the public that SGH would continue to provide subsidized care to persons who could not pay full cost and waive fees for anyone who could not afford even the subsidized rates. Since the reforms obviously implied a great deal of upset for staff, the government also stressed that “there is likely to be job (re-)classifications and the signing of new contracts but the terms and conditions of service will be as good as what staff are now enjoying.”

To deal with these concerns, implementation was phased in over time. Staff members were given three options: Option A—accept the new terms and conditions to join the company; Option B—take up to a year to decide; or Option C—remain in the civil service. By February 1989, 80 percent of the 647 staff members in the Singapore General Hospital and the Ministry of Health’s Pathology Department had opted for the new contract. Employment offers to the remaining 2,000 or more staff, including the Department of Biomedical Engineering and School of Radiography were still being made. The restructuring of the first six departments was started in January
1989 to try out the staff-absorption program and to transfer employees to the new working arrangements. This allowed the employment shifts to be phased in over time and minimized transition problems. On April 1, 1990, management and ownership of the hospital were transferred from the Ministry of Health to the new government-owned company, Singapore General Hospital (Pte) Ltd.

Trade unions communicated another concern about the reforms: emergence of differential access to high-quality services, either among wards or hospitals. Even before the reforms, there was a widespread perception that quality health care was associated with the higher class wards and was therefore less accessible to lower-income individuals in the subsidized wards. The liberalized pricing and salary regime in the reformed hospitals seemed likely to exacerbate this segmentation. The emerging difference in remuneration seemed likely to attract doctors away from employment in (unreformed) public hospitals, and, within a hospital, away from lower class wards. Since the more lucrative settings cater to higher income groups, including rich foreigners, it seemed likely that access to high-quality health resources and expertise would increasingly depend more on ability to pay than on medical need.

This issue was raised in November 1988 by the trade unions, even before the first public hospital was reformed. Unionists were concerned that their workers' benefits would be pegged to prices in (unreformed) government hospitals, blocking their access to the higher quality services available in the reformed hospitals. The deputy secretary of the National Trades Union Congress (NTUC) proposed that hospitalization benefits be pegged to the new SGH price regime, rather than to that of the (unreformed) government hospitals (which most employers based their employees' benefits on at that time). “To the workers, the logical move would be to make the Singapore General Hospital the standard, . . . [after the reform],” he said.12

After the SGH restructuring, the issue again flared up in July 1989 when the NTUC criticized some employers for classifying SGH as a private hospital and preventing workers from seeking treatment there. The NTUC also pointed out that many employers were shift-
ing the increased costs onto their workers, by making them pay the extra costs associated with treatment in the reformed SGH. The government stated their opposition to these practices, by noting that SGH was still a government hospital and that unions should not hesitate to take employers to the Industrial Arbitration Court if they held back on payment. The unions welcomed this clarification. Employers for their part were concerned with the escalating costs associated with reforms.

**Choice and Competition**

The reforms envisioned that the hospitals would focus more on attracting consumers and that consumer choice would place pressure on the hospitals to improve. Signs emerged that hospitals were generating excess demand for some services, and that this was leading to wasteful consumption and duplication. Pressure increased for the government to exert price and quality controls. As the reforms proceeded, it became clear that the increased choice and competition generated by the reforms necessitated additional regulation.

Some of these problems had cropped up early in Singapore’s hospital reforms. In the 1990 budget debate, the health minister provided reassurance that the government would closely monitor reformed hospitals for duplication of expensive services. He pointed out that the Ministry of Health continued to coordinate the development of services and purchase of costly equipment. Regarding the setting up of costly departments such as radiotherapy, the minister acknowledged the extremely high costs of duplication in such areas.

Notwithstanding the use of existing regulatory mechanisms, competition did lead to some wasteful duplication and cost inflation. In-vitro fertilization (IVF), for example, became available at seven different hospitals in Singapore. In the 1990 health budget debate, the chairman of the Government Parliamentary Committee for Health asked, “How many people can actually benefit from the program. . . . [T]he procedures are expensive and the success rate is not fantastic.” Moreover, the prevalence of IVF raised another issue: cost shifting from private to government hospitals. IVF often increases the fre-
quency of multiple births and underweight babies who require expensive neonatal intensive care. “Did the private hospitals have their own neonatal units or were they dumping babies with birth problems into the cheaper government hospitals?” asked the chairman.

Costs and Pricing

While employers and employees were equally concerned about the implications of the reforms on their own costs, the public at large was also concerned about the plight of the poor. Fears of price escalation and reduced access were rekindled when C class beds were phased out with the restructuring of SGH (Pte) Ltd. Members of parliament and political activists condemned this decision, and the first deputy prime minister admitted it was a mistake. The issue highlighted the explosively emotional nature of health care concerns, especially the humanitarian aspects of caring for the poor, the role of government, and the question of affordability. The present differential pricing for ward accommodation in public hospitals has much to commend it as an acceptable and workable system of cross-subsidization.

The differential charges in hospital bills as a result of restructuring soon began to surface as political issues. Several members of Parliament asked why the restructured Singapore General Hospital had raised its fees. The health minister had to justify the costs. The restructured hospitals were autonomous and would charge differently, according to their own itemized pricing. C class beds would still be available, and anyone who could not afford to pay could seek a waiver or a reduction of fees. Whatever the charges, the policy was that nonsubsidized patients in the A and B wards pay the full cost of treatment. For the first time, comparative costs for hospital stays in different hospitals and wards were made public (tables 12.1 and 12.2).

Not surprisingly, the government hospitals had the lowest fees; private hospitals, the highest. The minister explained that SGH had raised fees to pay for upgrades in facilities, equipment, and staff. Similarly, NUH’s higher fees reflected improved patient services and its status as a teaching hospital, where doctors conducted more tests.
themselves. There was thus no need to standardize fees for all restructured hospitals because an objective of restructuring was to allow the hospitals to run independently and to compete for patients.18

The Ministry of Health later published in the newspapers an explanation and table on the comparative average costs of hospital stays in government-restructured and private hospitals.19 The article also sought to clarify comparative costs quoted in a new information pamphlet on Medisave. The average costs per inpatient-day reported for government/reformed hospitals included doctors’ fees, but those for private hospitals excluded both doctors’ and surgeons’ fees (table 12.3).

**Physician Payment**

Since the reforms allowed the hospitals to structure their own payment system, disparities in physician incomes emerged.20 After the

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**Table 12.1** Average Cost of One-Day Stay in Hospital, April 1989 (in Singaporean dollars)

<table>
<thead>
<tr>
<th>WARD</th>
<th>GOVERNMENT HOSPITALS</th>
<th>SINGAPORE GENERAL HOSPITAL</th>
<th>NATIONAL UNIVERSITY HOSPITAL</th>
<th>PRIVATE HOSPITALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class A</td>
<td>255</td>
<td>355&lt;sup&gt;a&lt;/sup&gt;</td>
<td>385&lt;sup&gt;b&lt;/sup&gt;</td>
<td>480</td>
</tr>
<tr>
<td>Class B1</td>
<td>170</td>
<td>230&lt;sup&gt;a&lt;/sup&gt;</td>
<td>240&lt;sup&gt;b&lt;/sup&gt;</td>
<td>400</td>
</tr>
<tr>
<td>Class B2</td>
<td>55</td>
<td>70&lt;sup&gt;a&lt;/sup&gt;</td>
<td>80&lt;sup&gt;b&lt;/sup&gt;</td>
<td>97</td>
</tr>
<tr>
<td>Class C</td>
<td>40</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

<sup>a</sup> Not applicable.

SGH Singapore General Hospital; NUH National University Hospital.

<sup>a</sup> Before April 1, 1989.

<sup>b</sup> After April 1, 1989.

*Source: Straits Times, August 5, 1989.*

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**Table 12.2** Average Cost of “A” Class Hospitalization (in Singaporean dollars)

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>PUBLIC HOSPITALS</th>
<th>SGH</th>
<th>NUH</th>
<th>PRIVATE HOSPITALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical case</td>
<td>1,500</td>
<td>1,680</td>
<td>2,430</td>
<td>3,100</td>
</tr>
<tr>
<td>Appendectomy</td>
<td>1,650</td>
<td>2,110</td>
<td>2,670</td>
<td>4,300</td>
</tr>
<tr>
<td>Removal of gall bladder</td>
<td>3,050</td>
<td>3,600</td>
<td>4,030</td>
<td>5,400</td>
</tr>
</tbody>
</table>

SGH Singapore General Hospital; NUH National University Hospital.

*Source: Straits Times, August 5, 1989.*
reformed hospitals implemented schemes to pay senior and sought-after physicians higher salaries, it was necessary to extend this privilege to all government hospitals. Though intended to check the outflow of specialists from the public to the private sector, the removal of ceilings on fees widened the income gap and raised questions about how much doctors should earn and their obligations to poor patients. It also rekindled fears about abuses in the competition to capture paying patients, declining interest in training and research, and spiraling cost inflation.21

Mimicking the liberalization of the SGH and NUH, the rest of the unreformed hospitals removed their fee ceilings to staunch their doctor drain. Of the 260 government doctors who left public service between 1986 and 1988, 140 went into private practice.22 But the assumption that public sector doctors could be motivated purely by monetary incentives to stay was not justified. At the National University Hospital, 4 associate professors and 3 consultants resigned after the ceilings were removed, thus implying that reasons other than remuneration motivated their departure.23 There were also resignations from the Singapore General Hospital, and reports of several others planning to leave for the private sector. Most doctors who left discounted the importance of the lifting of the consultancy ceiling in keeping good staff, while citing nonmonetary and personal reasons.

Table 12.3 Average Cost of One-Day Stay in Hospital, December 1989 (in Singaporean dollars)

<table>
<thead>
<tr>
<th>WARD</th>
<th>GOVERNMENT/RESTRUCTURED HOSPITALS (INCLUDING DOCTORS’ FEES)</th>
<th>PRIVATE HOSPITALS (EXCLUDING DOCTORS’ FEES)</th>
<th>GOVERNMENT/RESTRUCTURED HOSPITALS (INCLUDING SURGEONS’ FEES)</th>
<th>PRIVATE HOSPITALS (EXCLUDING SURGEONS’ FEES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 bed</td>
<td>250–480</td>
<td>400–620</td>
<td>1,275–2,448</td>
<td>2,040–3,162</td>
</tr>
<tr>
<td>2–4 beds</td>
<td>170–420</td>
<td>200–520</td>
<td>867–2,142</td>
<td>1,020–2,652</td>
</tr>
<tr>
<td>6–10 beds</td>
<td>50–100</td>
<td>150–300</td>
<td>255–510</td>
<td>765–1,530</td>
</tr>
<tr>
<td>Open ward</td>
<td>40</td>
<td>n.a.</td>
<td>204</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

n.a. Not available.
Source: Straits Times, May 2, 1990

(c) The International Bank for Reconstruction and Development / The World Bank
Among the host of problems created by the new incentives was the widening income gap between medical specialties, especially between physicians and surgeons. A top surgeon could earn S$40,000 more a month than a top physician, since surgery commands a higher fee. The top money earners were reportedly specialists in heart surgery, eye surgery, and obstetrics and gynecology, who began to earn S$40,000 to S$60,000 a month, three to five times more than under ceilings. Top physicians earned S$15,000 to S$24,000, including consultancy fees, 50 to 100 percent more than previously. The new arrangements thus favored surgical and other costly treatments, using sophisticated facilities and investigative procedures.

Since the hospital reform, public sector doctors appear to be reasonably well compensated. Physicians in government-owned facilities receive basic pay plus a “clinical faculty supplement” of 25 percent of base wage. Physicians with very heavy clinical loads, especially in procedure-based specialties, may opt for an incentive based on their total billings instead of the fixed 25 percent supplement. A senior registrar (roughly equivalent to a postresidency fellowship in the United States) receives a salary equal to three times the country’s average annual wage. A junior staff physician receives five times the average wage, and a senior physician earns about six times the average wage. These incomes are comparable to medical earnings in the United States, where five to six times the average wage is normal.

**Impact of Hospital Reforms**

Many positive results have been achieved through the reforms, including increased financial responsibility and commercial discipline, as well as improved standards of hospital services and responsiveness to patients’ needs. From their new, quasi-independent status, hospitals have gained entrepreneurial flexibility and the ability to respond quickly to the changing supply and demand for hospital services. These hospitals also serve as benchmarks, competing against the private hospitals in terms of price and quality.
However, other, less favorable trends have emerged, and have had to be dealt with subsequently. Anecdotal evidence suggests that added quality may have come with administrative cost increases of 5 percent to 10 percent of recurrent expenditure. While it is difficult to generalize from individual hospital performance, Singapore General Hospital, the country’s largest hospital and one of the two public tertiary centers where high-technology procedures are concentrated, is the best example for studying the effects of the reforms.

Labor’s share of total hospital cost in Singapore is similar to that in the United States, but SGH is much leaner than its American counterparts. Of the nonphysician personnel at SGH (nurses and paramedical personnel, and others involved in ancillary services), only about one-sixth performs administrative and clerical functions. Even in benchmark American hospitals, the ratio of caregivers to support personnel is 2:1.25. The 5:1 ratio at SGH reflects increased efficiency as a result of the lightened bureaucratic and regulatory loads Singapore places on the delivery system. Although nurse-to-patient ratios in Singapore hospitals are in line with international standards, nurses are relatively less well paid, and demand for foreign nurses is increasing.

Media reports have highlighted shortened waiting times and lengths of stay and the virtual disappearance of wait lists for many programs, including elective procedures. Innovative projects and the acquisition of new medical technologies and treatment regimes have also been noted. The governance and funding structure fueled a more competitive environment and generated a more market-oriented approach in the promotion of new products and services. However, whether any additional supply goes to fulfill previously unmet demand—or merely generates unnecessary consumption—is open to debate.

The government has put in place revenue caps on reformed hospitals to prevent them from generating the “excess profits” associated with induced demand. The government has also established limits on average charges per patient-day and will adjust them annually. Hospitals that exceed the limits have their government subsidies cut by that amount; hospitals with a budget surplus now keep the additional funds.
Historically, the rate structure of public hospitals may have indirectly influenced private hospital rates, assuming public sensitivity to price differences. The government has also threatened to impose direct cost controls on private hospitals and doctors, especially for “balance billing,” where providers charge much more than the limits set in various public financing programs. However, implementing direct cost controls is inherently difficult unless the payment system and fee schedule are standardized and adjusted for different risks and severity of disease conditions. The absence of a case-mix classification of patients related to diagnostic groups complicated this situation at that time. A case-mix system that was modified from the Australian DRG model was subsequently introduced in 1999.

**Technical Efficiency**

Financial statements in the annual reports of the restructured hospitals under the Health Corporation of Singapore provide data on hospital expenditures and revenues, from which cost-recovery ratios could be calculated. Except for the National University Hospital, all hospitals have improved on their cost-recovery positions (figure 12.1). However, the NUH cost-recovery ratio is still higher than those for other restructured hospitals, except for the Singapore National Eye Centre, a specialist center. In this aspect, hospitals could have become more efficient as they recovered more of their costs.

Not only are the hospitals improving upon their cost-recovery status, their cost-recovery indices also seem to be converging at between 0.4 and 0.6. This trend could be attributed to the government’s policy of taxing a certain part of the hospitals’ earnings. Hospitals may not have any incentives to improve their cost-recovery status if excess revenues will be taxed away. From the social perspective, the rationale behind this policy is to prevent hospitals from overcharging patients in a quest for higher revenue.

Different types of hospitals display different trends and cost-recovery ratios. Ang Mo Kio Community Hospital has the lowest cost-recovery ratio (0.4), which is consistent with its status as a community hospital. Community hospitals provide services to the elderly and the chronically ill, which are highly subsidized. Secondary
hospitals like Changi General Hospital and Tan Tock Seng Hospital are the next lowest in terms of cost recovery. Their charges are lower than the tertiary hospitals (SGH and NUH), which explains the higher cost-recovery ratios for tertiary hospitals. Kandang Kerbau Hospital for women and children, and Singapore National Eye Centre, a specialist center, are not comparable with the rest.

To provide a better insight into how hospitals’ costs were recovered, figures 12.2 and 12.3 show revenue and expenditure trends. As seen in the figures, every hospital’s revenues and expenditures rose. Since cost-recovery ratios have increased, revenues may have
Figure 12.2 Hospital Revenues, 1990–97 (in Singaporean dollars)

![Graph showing hospital revenues from 1990 to 1997 for various hospitals in Singapore.](image)

**Note:** See figure 12.1 for full names of hospitals.

**Source:** Compiled from annual reports of various hospitals, Health Corporation of Singapore.

Figure 12.3 Hospital Expenditures, 1990–97 (in Singaporean dollars)

![Graph showing hospital expenditures from 1990 to 1997 for various hospitals in Singapore.](image)

**Note:** See figure 12.1 for full names of hospitals.

**Source:** Compiled from annual reports of various hospitals, Health Corporation of Singapore.
increased more than expenditures. Higher admissions and bed-occupancy rates and increases in hospital charges could explain the increase in revenues. Purchases of more sophisticated and expensive medical equipment explain the inevitable increase in charges.

**Physician/Nonphysician Ratios**

The hospitals’ physician/nonphysician ratios have remained relatively constant or have fallen (figure 12.4). Hospitals may be recruiting more nonphysician staff for management and administrative duties, a more efficient arrangement than in the past, when doctors performed these functions. In addition, only a sixth of nurses, para-medical personnel, and others delivering ancillary services are involved in administrative and clerical functions. Even in benchmark American hospitals, the ratio of caregivers to support personnel is 2:1.25. The 5:1 ratio at SGH reflects increased efficiency as a result of Singapore’s lighter bureaucratic and regulatory loads on the delivery system.

![Figure 12.4 Physician/Nonphysician Ratios, 1989–97](image)
Hospital Admissions

Admissions to both public and private hospitals have increased (figure 12.5). Until the regional financial crisis of 1998 reversed this trend, admissions had been growing faster at private hospitals than at public hospitals.

Allocative Efficiency

To ensure that the lower income groups are not deprived of health services because they cannot afford them, subsidies for hospital Class C wards are 80 percent. B2 wards cater to middle-income earners; B1 and A wards are for high-income earners. From the equity perspective, subsidizing the poor more than the rich makes sense, but this means sacrificing efficiency to equity.

Based on data from Singapore General Hospital, the average length of stay in a C class ward is longer than in the other ward classes.
However, there is no medical reason that a stay should be longer for similar cases and conditions. One explanation is that C class wards, being heavily subsidized, are overutilized. Patients, especially the elderly and chronically ill, though ready to be discharged, might choose to stay a few more days for lack of alternative facilities. The better-off may have domestics to take care of them after discharge. As a result of the increased length of stay, the bed occupancy rates for C class wards are sometimes more than 100 percent. This is generally true for the bed occupancy rates of hospitals in the public sector (figures 12.8 and 12.9).

**Equity**

Subsidized care in Singapore accounts for about 20 percent of all health care expenditure, 0.7 percent of GDP. A key component of the government’s policy for equity is a tiered structure of subsidies, based on the setting in which care is delivered and the amenities provided with it. In the public hospitals, the different classes of wards receive varying degrees of subsidy; private hospitals are unsubsidized. A major change after the national health policy review and hospital restructuring in 1991 was to ensure that subsidies were targeted by...
**Figure 12.7** Average Length of Stay, Singapore General Hospital, 1990–97

Source: Health Corporation of Singapore.

**Figure 12.8** Bed Occupancy, by Ward Class, Singapore General Hospital, 1990–97

Source: Health Corporation of Singapore.
appropriate channeling of patients into the appropriate ward classes. Their ability to pay is roughly determined by their Medisave account balances, a form of means test.

Individuals are theoretically free to choose whatever ward accommodation level they prefer. However, at the time of admission, patients are advised of their responsibility to choose a ward class they can afford through a combination of Medisave, Medishield, or personal funds. If necessary and with the owner's consent, patients can draw on their spouse's, children's, or parents' Medisave accounts.

Class A wards have no subsidy and compete with private hospitals, offering private rooms with such amenities as air conditioning, television, and en suite bathrooms, in addition to the government's list of basic services. Care delivered in the remaining four wards—B1, B2+, B2, and C—is supported by varying levels of government allowances. For example, the subsidy level in a Class B1 ward is 20 per-
Attacking Hospital Performance on Two Fronts

percent of the total charges. Patients are responsible for the remaining 80 percent. The fraction paid directly by the government increases as amenities decrease, reaching 80 percent for C class. B1 wards have four beds to a room; B2 patients do not have a choice of physicians; C wards are generally open wards. In addition, Medishield pays a greater part of the hospital charges for poorer patients and those who elect to receive their inpatient care in the subsidized hospital settings.

**Quality**

Singapore has one of Asia’s most sophisticated health care delivery systems. The admission rate for residents is 1.1 per 1,000 population, about the same as the more aggressively administered health maintenance organizations in the United States. The average length of stay at an acute care hospital is five days, also comparable to the best U.S. managed-care programs and far less than that in other developed countries. Occupancy rates are kept well above 80 percent, and in many reformed hospitals exceed the 90 percent mark.

High-technology services are provided at what appear to be appropriate levels. In 1993, of the 1,051 coronary artery bypass surgeries performed, 676 were provided to Singapore residents for a raw utilization rate of 24 per 100,000 population. Because Singapore’s population is relatively young, the age-adjusted utilization rate, though lower than in the United States, probably approaches that of Canada, Germany, and most West European nations. These data suggest that services are available at levels acceptable by most international standards and that high-technology medical services are generally available to the population. The reformed hospitals do not have the queues and long waiting times that characterize heavily regulated national health service systems in many other developed countries.

**Conclusions**

The primary objectives of Singapore’s hospital reforms was to control government and total health care expenditures, to improve the quality of hospital services, and to improve the working conditions of government health personnel (box 12.2).
Box 12.2 Assessing the Finance Reforms

Resource mobilization

A high priority on Singapore’s health reform agenda is mobilizing enough resources to finance efficient and equitable provision of health care to meet increasing demand. Singapore has chosen to increase cost sharing by individuals and their families, supported by the introduction of mandatory medical savings accounts.

Currently Medisave covers less than 10 percent of total health spending and about 30 percent of hospitalization expenditures. Over the longer term, the role of medical savings accounts is destined to grow considerably. Already, the assets accumulated in members’ savings accounts are equivalent to four years’ worth of Singapore’s national health expenditure. This constitutes a substantial nest egg for the future aged population and could cover other contingencies such as economic recessions when welfare consumption rises.

Efficiency

Since Medisave balances are reserved to pay for infrequent but high-cost inpatient care, Singapore’s financing system has succeeded in targeting actual insurable risks rather than predictable costs (such as outpatient care). However, because they depend on intertemporal pooling over the individual’s life cycle, it is not actuarially feasible for Medisave balances to insure against truly catastrophic contingencies. To solve this problem, Singapore introduced Medishield—a back-up health insurance program based on cross-sectional risk pooling, designed to finance the extreme catastrophic part of the risk distribution.

Government policies on cost sharing to help control moral hazard and contain costs in social insurance programs vary greatly. Health financing policy in Singapore combines...
appropriate deductible and coinsurance rates with explicit targeting of costly risks. On average, the government subsidizes about 60 percent of hospitalization costs in public hospitals. The residual 40 percent charged to patients is covered between Medisave and out-of-pocket payments. Thus, patients feel a double bite of individual responsibility—the 20 percent coinsurance paid out of their Medisave account and another 20 percent paid directly out of pocket. Claims for back-up Medishield coverage of catastrophic expenses are subject to 20 percent coinsurance on top of a high annual deductible.

**Equity**

Reforming pricing policy for publicly provided services is likely to be an important instrument to improve equity in the incidence of public spending. Users of publicly provided health services, especially inpatients, often face substantial out-of-pocket costs, which can bar access for the poor. Improving access may require selective price reductions, compensated by increased direct budget subsidies. Implementing this strategy calls for a pricing policy that consciously differentiates prices by users’ income. In this way, public subsidies can be targeted. Self-selection, by charging lower prices for services more likely to be used by the poor, is another targeting mechanism. Alternatively, subsidies can be targeted directly by mean-testing individual users. Singapore’s health reforms demonstrate both approaches to promoting equity.

Budget subsidies, targeted to poorer users by self-selection through public sector pricing policy, continue to play a major back-up role in financing hospital inpatient care. Explicit price discrimination is built around the different classes of hospital wards in public sector hospitals. The subsidy ratios are highly differentiated, ranging from 84

(Box continues on the following page)
Lack of data prevents a more comprehensive evaluation of the effects of restructuring. This review of available indicators suggests that the reforms improved hospital efficiency in terms of administration and cost recovery. Heightened competition has brought about a rise in admission rates for both public and private hospitals as well as

percent of hospital costs in the lowest Class C, to 71 percent in Class B2, 36 percent in Class B1, to 13 percent in Class A.\textsuperscript{c} These differential subsidies are intended to help equalize the affordability of the class-specific prices relative to the incomes of patients who select them.

As a last resort, patients who cannot pay their subsidized hospital bills can apply for a means-tested grant from their Hospital Medifund Committee. This safety net is targeted directly at households in the lower third of income distribution. During its first three years of operation, Medifund paid the entire medical bill in 87 percent of requests for assistance. This now amounts to around 5 percent of hospital admissions at the lower Class B2 and C levels, compared with 3.3 percent in 1993, 4.2 percent in 1994, and 5.8 percent in 1995.\textsuperscript{d}

\begin{itemize}
  \item[b.] Ibid.
  \item[d.] Ibid.
\end{itemize}

Lack of data prevents a more comprehensive evaluation of the effects of restructuring. This review of available indicators suggests that the reforms improved hospital efficiency in terms of administration and cost recovery. Heightened competition has brought about a rise in admission rates for both public and private hospitals as well as
an increase in service quality. There has also been a discernable shift from government expenditure to self-payment, with the expanded “insurance” coverage provided in the “Medi-schemes” described above.

Thus far, service delivery reforms have concentrated on public hospitals. While the past system involved the government in extensive provision and financing of health services, the National Health Plan implemented a strong shift away from tax-based health care expenditure toward greater cost sharing. These reforms substantially altered the nature of demand, generating clearer signals about what services were needed, and what patients wanted. The application of the corporatization model to public hospitals was critical in creating a public hospital sector that, like the private sector, responded to such signals. By keeping ultimate control in public hands, Singapore appears to have found a structure that provides them with, in some sense, the best of both possible worlds.

Acknowledgment: The author is greatly indebted to the late Nicholas Prescott who provided not only guidance and insights for this chapter but also wise advice and inspiration for social protection and health care reform during the recent economic turmoil in the East Asia and Pacific region.

Notes

1. In 2000, the Health Corporation of Singapore was devolved further into two separate clusters of hospital groups that are integrated with their primary care network of polyclinics.

2. Other countries discussed in this volume that operate these cross-subsidy schemes include Indonesia and Hong Kong.


10. Ibid.


14. For example, competing hospitals might generate unnecessary services and pass on the costs to misinformed consumers, enabling them to procure unneeded high-technology equipment or to undertake other capital development programs.


18. Ibid.


26. Ibid.

27. Ibid.

28. Ibid.
Between 1992 and 1995, Tunisia undertook a multifaceted hospital reform aimed at its 22 teaching hospitals. The initiative included elements of technical, managerial, and organizational reforms. A large-scale investment program was undertaken to upgrade facilities, equipment, and management information systems. On the managerial development front, efforts were made to train existing managers and provide them with resources on the job to support better performance. In addition, significant efforts were made to recruit and retain new professionals possessing management skills in contrast to the administrative skills of the existing cadre. The organizational changes were grounded in the conversion of the hospitals to legally independent status, the creation of a board structure, and initiation of multiyear performance contracts between the Ministry of Public Health (MPH) and the hospitals.

The organizational changes were a relatively minor component of the reforms, with the endpoint arrangements closer to a budgetary than an autonomous entity. Somewhat perversely, in fact, despite the use of structures typically associated with enhanced autonomy, the
reforms ended up increasing the administrative influence of central authorities over the hospitals. Thus, the Tunisian reforms underscore the distinction between formal governance structures and actual governance practices. While it is clearly important to put in place organizational arrangements that support the desired governance processes—it is not sufficient. In Tunisia, as in the United Kingdom, structures developed to support enhanced autonomy ended up serving as a vehicle for centralization.

The Tunisian reforms are also interesting in that they sought to make technical, managerial, and organizational changes simultaneously. Further, the reform is viewed largely as a success in the country and has proven to be sustainable. Thus, its multidimensional design will be of interest to other countries faced with reforming a hospital system with problems requiring efforts on all three fronts.

It is not possible to draw conclusions about the impact of the organizational changes separately, since changes on all these fronts took place simultaneously. The reader is encouraged to keep this in mind when reviewing the discussion of results.

**Context and Background**

Between Tunisia’s independence in 1956 and the 1980s, the government’s main health care objective was to guarantee coverage to all via public health facilities. Little attention was paid to cost, and by the late 1970s, these facilities were under growing financial pressure. Other sources of funding had to be found. In 1981, the MPH began experimenting with pro forma invoicing of public hospital admissions in an effort to find out the cost of care and how much funding the system needed. In 1983, the contribution from the social security fund was increased, and user charges were introduced. This initiative was launched without arrangements for proper training or adequate financing and was subsequently abandoned. After several other false starts, political changes in November 1987 led to a study of health sector malfunctions.
Two types of problems were diagnosed in public hospitals, particularly university hospitals: inadequate funding mechanisms and internal inefficiency. In funding, budget appropriations were insufficient to meet emerging demand for services, social security contributions did not meet the cost of care for services rendered to their contributors, too many users received free care, input prices were rising, and information on the cost of care was scarce.

Internal inefficiency was attributed to a range of interdependent factors, both general and technical in nature. These shortcomings included: managerial inability to evaluate performance, poor input monitoring through inventory control, waste of resources, ignorance about the real cost of health services; rigid administrative and budgetary procedures; inflexible personnel management regulations; insufficient reliable management information for diagnostic assessment and well-targeted decisionmaking, and uncertainty about the distribution of powers and functions among the different administrative levels (individual hospital, regional authority, central government).

**Changing View of the Role of the State**

The public sector has always been predominant in Tunisia’s health care system. In Tunisia, as in many other countries, current political thinking calls for a restructuring of the state’s role in the economy as well as the private sector’s roles to make room for individual initiative, healthy competition, and innovation. The broadly held vision is for a state that will concentrate on creating conditions conducive to social development and providing infrastructure and social services.

**The Reform Package**

The reforms were implemented in 22 hospitals; another 4 were eliminated via merger.
Objectives

The Tunisian government’s reform program is directed chiefly at raising the quality of hospital services and controlling public health expenditures, by ensuring appropriate billing and cost recovery for services in public facilities. The program was designed to:

- Improve the internal efficiency of major teaching hospitals, while also containing costs and improving service quality
- Enable adjustments to be made in financial burden sharing by formulating data to connect the use of hospital services with payment by insured and nonpoor uninsured patients.

Organizational elements. To meet these objectives, teaching hospitals were converted into government-owned health corporations (EPSs). The EPS has legal status as a corporate entity under commercial law. It is financially independent, overseen by a Governing Board, and run by a chief executive officer (CEO) under MPH supervision. Multiyear performance contracts were initiated between the MPH and the CEOs.

Technical elements. An infrastructure upgrade program was instituted for equipment to improve diagnostic and treatment capabilities, hospital maintenance, patient accommodations, and hospital hygiene. In addition, hospital administration and reception areas have been renovated to accommodate the expansion of administrative business and new opportunities for treating patients.

An integrated, computerized management information system (MIS) was introduced—although it covers only a part of hospital activities. This system is designed to enable the cost of health care to be determined and will require further expansion to cover the entire range of activities undertaken in the hospitals. Performance measurement criteria have been developed to allow comparison across hospitals (benchmarking) and to feed into the drawing up of the contracts. A Computing Center was established in the MPH, to enable the software designers to work closely with the hospital managers.
An Information Technology Committee oversees the quality and consistency of these initiatives.

**Managerial elements.** The management capabilities of hospital administrators were targeted for improvement. Management functions have been reorganized, following a standard organization chart. Tasks have been separated to eliminate incompatibilities and reinforce internal controls. A handbook of standardized management practices has been produced and put into computerized form. New managers were recruited to fill gaps, and personnel were trained to improve their managerial skills, especially in MIS use. Technical and financial support is being provided for a master’s degree program and a diploma course in hospital administration at the School of Commerce.

**Complementary reforms.** The Free Medical Care System has been reorganized and the criteria for entitlement to subsidized health care have been further elaborated. In addition, the prices at MPH-controlled public health facilities, and patient-assignment procedures have been refined.

Subsequent to the reforms, billing for hospitalization of social security contributors was introduced in January 1996, based on a flat admission charge. In January 1997, it was extended to outpatient consultations, using the same rate-setting system. However, it does not apply to all sources of funding.

**The Organizational Reform**

**Decision Rights**

**Day-to-day operation.** Reduction of day-to-day intervention was planned, and performance contracts came to play a greater role in ensuring accountability. Therefore, the reforms provided for EPSs to negotiate performance contracts that set out operating and investment budgets and funding plans, which were to be aligned with
the organization’s goals and projected activities. The Governing Board was assigned the right to approve performance contracts on the hospital side.

**Personnel management.** EPSs were given no significant decision rights in personnel management. All public health facilities are covered by the civil service regime and therefore have no autonomy in human resource decisions (staff size, recruitment, salary levels, or promotions). The reforms did endow the EPS with the right to handle disciplinary procedures directly in the cases of certain personnel, excluding medical, pharmaceutical, and dentistry practitioners and certain classes of administrative personnel.

The EPSs were also given certain rights to define how administrative departments were organized, including the number and level of functional positions. Appointments of physicians, pharmacists, and dentists as heads of hospital departments are handled in the same manner for all public health facilities.

• **Property management.** Apart from some small legal distinctions, there are no practical differences between the EPS and the traditional hospitals with regard to ownership and management of property.

• **Organization of management.** EPS Governing Boards formally received some of the MPH’s rights to organize hospital management, within parameters set out by decree (though the proposals must receive MPH approval). This included the right to open and close departments. As noted above, EPSs did gain additional flexibility in determining the number and level of functional positions.

• **Procurement.** The legal change to the EPSs gave them some decision rights related to procurement. Public hospitals must follow competitive contracting procedures for contracts above D30,000. By contrast, EPSs can forgo these time-consuming tenders for contracts up to a value of D100,000, with permission from the Governing Board.
• **Financial management.** The Governing Board formally received the right to draw up operating and investment budgets and associated funding plan. The EPSs received the formal right to take out loans.

**Residual claim status.** The EPSs were given additional freedoms in managing their operating surpluses. All public hospitals can retain funds earned through their activities, whether in the form of government subsidies, contributions from social security funds, or co-payment revenues from users. They may recycle operating surpluses (in excess of budget projections) into either their operating budgets or their capital budgets. However, for these allocations, public hospitals must receive approval from the Finance Ministry and MPH, while EPSs need only a decision from their board.

**Accountability Mechanisms**

**Governing board.** While public health facilities have only a consultative body, a “health council,” the reforms gave each EPS a governing board—a mechanism for exercising, at least formally, indirect guidance over the hospitals activities. A typical EPS Governing Board has 16 members including significant representation by hospital staff (9 chosen by MPH and 7 elected from the EPS medical and paramedical staff). The board chairman, chosen by the minister of public health, represents the MPH and sets board meeting agendas on the recommendation of the chief executive officer, who is not a board member. The board, by decree, “is invested with the widest powers to act in the name of the institution,” including opening and closing departments, approving performance contracts, and drawing up operating and investment budgets and associated funding plans.²

**Chief executive officer.** The reforms also provided for accountability to be exercised via ministerial control of the CEO’s appointment. The CEO’s responsibilities include: running the hospital’s technical, administrative, and financial affairs; preparing the board’s work and ensuring implementation of its decisions; representing the hospital in dealings with third parties; ensuring recovery of health care costs;
awarding procurement contracts; drawing up the hospital’s operating and investment budgets and associated funding plans; and exercising authority over “all personnel.”

**Performance contracts.** A core part of the new accountability structure was grounded in performance contracts, which were intended to be established between the MPH and EPSs. Over time, as more information about hospital performance became available, the MPH budget allocation would be based on these indicators. A system of benchmarking hospitals would be developed, enabling MPH authorities to compare a hospital’s performance with that of other hospitals, and to its own the preceding year. Thus, even without direct competition, pressure to improve performance would develop.

**Medical Committee.** The reform also created a second, subordinate boardlike structure called the Medical Committee. The committee includes the CEO, department heads, and representatives of other groups of health professionals. Its prerogatives include: defining the hospital’s annual medical research program; monitoring studies in progress; assessing departmental care, training, and research activities; producing an annual report assessing the technical and economic care provided by the hospital; and answering all requests for its opinion from the minister of health or the Board of Directors.

**Market Exposure**

The reform design provided for little additional market exposure for the EPSs. Public hospitals were already earning a proportion of their revenue from out-of-pocket payment, so this relatively small portion of income was tied to the sale of services. At the time of reform, the social security institute was also supposed to pay for services rendered to contributors. However, this wasn’t widespread until a subsequent, separate reform.

**Social Functions**

No reform provisions provided for social functions to be made explicit, nor were steps taken to tie revenue explicitly to services ren-
dered to the needy. By law, free health care is rendered to individuals participating in scientific studies or disease prevention campaigns; victims of epidemics; citizens, spouses, and legally dependent children not affiliated with the National Social Security Fund (CNSS); and members of certain professional groups.

**External Environment**

In addition to changing the organizations (hospitals), the reforms also provided for some changes to their external environment, primarily in the area of the MPH funding processes.

The three major sources of revenue for EPS hospitals were the MPH, the CNSS, and revenue they generate from the sale of services to paying customers. The MPH funding is segmented into operational and capital streams. The operational funding must cover 100 percent of payroll for as many employees as the MPH deems necessary. Though the base amounts were calculated according to various norms, prior to the reforms the annual allocations were calculated essentially as budget-balancing subsidies (excluding payroll and investment). Social security fund contributions were also determined without reference to hospitals’ real activities.

The plan was that funding from the MPH would start to be tied explicitly to performance indicators (established in the performance contracts). This would reduce the uncertainty that came from the annual negotiating process—and reduce the perverse incentives associated with adjusting the amount based on the hospitals’ budget shortfalls.

The reform package also supported efforts to tie social security contributions more directly to services rendered. This component was to include setting up a system for tracking services provided to contributors and sending out bills.

**Market Environment**

There was no attempt to put the EPSs in direct competition, either with one another or with private hospitals (other than the competition that already existed for patients paying privately). However, the
added cost recovery has reduced their price advantage over private hospitals.

EPSs do compete with other hospitals, both public and private, for medical staff. Low public salaries constrain the EPSs in attracting staff.4 The reforms provided additional flexibility to EPSs to help them recruit competent managers.

EPSs exert no control over the demand for health care or rates, as the MPH determines their sources and levels of funding (table 13.1).

**Positions of Major Stakeholders**

Citizens and hospital users felt negatively about the reforms, accompanied as they were with the shift to increased household payments. The population generally saw health care as a right and held public health facilities responsible for providing the best-quality care that was financially feasible.

Health care professionals also held negative views about the reforms, since they view services delivery as their “territory,” and resented what they saw as an invasion by government. The positive results of the reforms are either less apparent or less important to staff members. Among providers of care, nurses in particular see the reforms as imposing extra work without any additional compensation.

**Table 13.1** Operating Costs of Public Health Facilities, by Source of Financing

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<td>AMOUNT a</td>
<td>PERCENT b</td>
<td>AMOUNT a</td>
<td>PERCENT b</td>
</tr>
<tr>
<td>Public sector</td>
<td>147.3</td>
<td>85.0</td>
<td>217.1</td>
<td>84.9</td>
</tr>
<tr>
<td>Social security funds</td>
<td>19.0</td>
<td>11.0</td>
<td>24.5</td>
<td>9.6</td>
</tr>
<tr>
<td>Own revenue</td>
<td>7.0</td>
<td>4.0</td>
<td>14.1</td>
<td>5.5</td>
</tr>
<tr>
<td>Total</td>
<td>173.3</td>
<td>10.0</td>
<td>255.7</td>
<td>10.0</td>
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</table>

*a. In millions of dinars at current prices.
*b. Percentage of total operating costs.

Source: Ministry of Public Health, Tunisia.
Implementation

The personal interest taken by the president of the Republic provided the driving force for the hospital reforms. The minister of public health personally holds regular evaluation meetings. A Hospital Reform Management Committee was formed at the beginning of the reform process, which brought together MPH officials, EPS CEOs, and officials from the Finance Ministry, the Economic Development Ministry, and the Ministry for International Cooperation.

Political backing was strong—as evidenced by the willingness to mobilize the required funding. It was also reflected in the many meetings of the Ministerial Select Committee, chaired by the president of the Republic, to monitor reform implementation. This political and technical “pressure” has maintained momentum and has helped resolve difficulties that have arisen during implementation. Political and governmental stability, and the stability in office of the people responsible for putting the reforms into effect, contributed to sustaining the reform process.

In addition to the Ministry of Public Health, other key ministries—Finance, Economic Development, and Social Affairs—have been extensively associated with the design of the reform process and have supported it.

CEOs and chairmen of Governing Boards and Medical Committees met periodically to debate every aspect of hospital reform. The EPSs and MPH headquarters coordinate closely, particularly on recruitment of managers to implement new organizational procedures and the MIS.

Communication Strategy

A consensus-building information strategy was conducted primarily toward medical personnel and only secondarily toward administrative personnel. No significant efforts were made to garner the support of nurses at the start of the reform, but this choice had to be reversed as implementation proceeded.
The general public was informed via the media. Debates in the Chamber of Deputies mirrored the course of the reform process, from analysis of objectives and implementation to results assessment and possible extension of reforms to other parts of the system.

The government has also implemented a communication and information strategy through seminars, day workshops, articles, and TV debates, all aimed at affecting Tunisians’ relationship with their health care institutions. Public reaction was initially lukewarm, marked by fear that “the health sector was being privatized” and that access to health care would be more difficult, especially for poor or low-income groups. This mistaken assumption gained ground because some EPSs had subcontracted out certain nonclinical activities and because rates and copayment levels had been raised. The general public also saw the increased seriousness about collecting from users as a sign of privatization.

The university medical corps and its professional organizations were particular targets of the information campaign. Most often, reforms were presented to them as a way of resolving their professional problems. The medical profession reacted with apprehension regarding the new powers of EPS CEOs. At the same time, some doctors wanted to extend reform objectives to areas they were not designed for, such as the organization of training, university and hospital medical careers, and relations with the private sector. With time, understanding of the scope of the reform grew and the idea found more acceptance within the medical community.

However, despite the strong political will and other favorable factors, implementation was rocky. The many difficulties were evidenced by the withdrawal of responsibility for management and staff salaries one year after it was given to the EPSs under the reforms. This event almost certainly served to undermine belief that the reforms would “stay the course” in contentious areas.

In the beginning, the hospital reform process had to be grafted onto the public sector’s traditional working mechanisms. The MPH had apprehensions about the change from a vertical organization (structured around resources), to a horizontal organization (integrating functional components), which led to implementation delays.
This situation was especially difficult because the MPH supervisory authorities had retained their existing organization, and the reforms were being put into effect by an external agent, the Hospital Reform project.

*Monitoring and Evaluation*

Reform monitoring was carried out by the Project Coordination Unit (PCU) and the MPH Computing Center. Individual facilities proposed management-procedure updates and submitted them to a steering committee (composed of EPS CEOs, computing center representatives, and the authors of the updates), which ensured standardized procedures throughout the hospitals. The computing center then updated the system software to reflect the procedural changes, and the computer applications were tested and approved by users and the steering committee. In addition to its specific responsibilities for this project, the PCU also handled EPS board recommendations, monitored EPS performance (including billings), and drew up their operating budgets.

Two evaluation programs were launched, one by the World Health Organization–Pan American Health Organization, the other, by a group of civil servants reporting to the prime minister—in addition to periodic MPH and World Bank monitoring activities.

*Results*

*Reform Design*

With regard to reform design, the changes that took place essentially brought about centralization under the guise of autonomy. The decision rights the hospitals were intended to receive were fairly minimal. However, the decision rights actually allocated to the hospitals and their boards were even less. Although the EPSs received the right to take out loans, this has not materialized in reality. As noted above, the reforms were not intended to delegate much labor management decision rights to the hospitals, although a higher salary base was established for EPS CEOs.
The new governance framework, including lines of authority between facilities and the MPH, was not elaborated. The EPSs and MPH headquarters have not been able to find a reasonable balance between centralization and decentralization, between autonomy and dependency. The powers of the EPS Governing Board turned out to be limited in practice. The medical committees did not take up their allocated tasks, mainly because of ambiguity regarding the way they should operate and their authority over staff. The performance contract mechanism was not established.

MPH funding was never tied to performance. Efforts were made to tie revenues more directly to services rendered, and now services to CNSS contributors are billed separately. However, since the total payment is capped and the volume delivered always exceeds the services paid for, this funding stream also reduces to a block payment (untied to services).

**Process—Pros and Cons**

In addition to the reforms, other important changes were occurring. In particular, the proportion of the hospitals’ income that came from the MPH was decreasing, and households were making greater contributions in the form of out-of-pocket payments. Increased copayments, and tighter eligibility for subsidized and free care, contributed to the shift toward household payments. The trend in shares of health care expenditures by the three major sources of funding are illustrated in table 13.2. The Ministry of Public Health resented the wide range of responsibility of the PCU in implementing the reforms that encroached upon those of MPH departments.

Some incentive-creating measures are beginning to produce improvements in overall hospital performance. These include: adopting cost-based billing and internal performance-based budgeting; giving computers to hospital departments that help to improve facility performance; and increased consulting between hospital departments on the formulation of hospital policies.

The increased central influence reduced the independence of medical staff and was strongly resented by them. The professional
medical organizations considered the CEO’s official powers excessive. Medical staff also resented the ministry’s prerogative of selecting the chairman of the board, which they would prefer to see come from senior EPS staff.

As implementation of reform gathered momentum, the MPH and the CEOs realized that more attention should be paid to nursing staff. Apart from a few workshops organized by the nurses’ labor union and some professional organizations associated with the governing party, no significant actions had targeted this group. Yet, because of their natural place in the health system, nurses relate more frequently and more closely to the general public than any other group of health care professionals. As a result, a number of actions have been initiated.

The EPSs have poorly received some aspects of the reform process. These include: the practice of reducing, or merely maintaining, government subsidies for operating budgets; the withdrawal of responsibility for management and staff salaries one year after it was given to EPSs; continuing dependence on MPH headquarters for investment and manpower resources; delay in making temporary management staff permanent; and the allowance for university hospital physicians to work also in the private sector.

Recruitment of competent, professional-rank management staff from outside the MPH remained problematic. Because of restrictions on monetary compensation, some EPSs have begun to offer management staff benefits in kind. Despite the significant efforts made to develop capacity at the managerial level, supervision of the operational aspects of the hospital reform process has been weak.

<table>
<thead>
<tr>
<th>Table 13.2 Health Care Spending (percent)</th>
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<tbody>
<tr>
<td><strong>SOURCE</strong></td>
</tr>
<tr>
<td>Public sector</td>
</tr>
<tr>
<td>Households</td>
</tr>
<tr>
<td>Social security</td>
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</table>

*Source: Ministry of Public Health, Tunisia, based on household’s consumption surveys of the National Institute of Statistics.*
Qualified personnel have been very hard to find and the supervisory authority turned out to be poorly organized. Supervision is provided by a small number of experienced officials, assisted by younger staff who have no practical experience in the health care field. The operational capabilities of the executive and management teams in charge of implementing reforms in hospitals differ from one EPS to another and depend on numerous factors, such as the CEO’s knowledge, aptitude, and methods, and the attitudes of the medical corps, especially its leaders and professional organizations.

Important problems also arose in relation to CEO recruitment. The appointment criteria excluded some individuals who had directed university hospitals before their conversion into EPSs and, while CEOs’ pay was increased, all other senior EPS management staff members remained at the same salary level as their civil service counterparts. Efforts to recruit competent managers have not been entirely successful, either, and some EPSs (about 11 percent) have hired individuals ill suited to their jobs.

CEO performance still depends on the way the MPH perceives its changing role and functions and on the recruitment of EPS managerial staff, which has been slow. Reliance on temporary management personnel has helped resolve immediate difficulties but, because temporary contracts can be precarious, many of these managers look for more stable and better paid jobs elsewhere.

Essentially, the indirect accountability instruments were not developed. Supervisory activities continued to be done in such a way that the true level of autonomy for hospital CEOs and boards is quite low. In this way, the reforms actually led to increased central control over hospitals.

**Overall Positive Outcomes**

Even though many of the organizational elements of the reform didn’t work out, the hospital reform package and associated investments have resulted in clear benefits. Included among these are improved patient and staff working conditions at EPSs due to
building renovation and new equipment, expanded access to university hospital services, and more cost-conscious physician behavior. Physicians are making a transition from a department-oriented mentality to a corporate-hospital mentality, one more appropriate for an organization whose mission is to provide services. The government has been able to reduce the burden of covering deficits as health sector operating budgets have decreased, and social security funds have increased financing for their members’ care. Clinical and administrative departments are also working together. Some observers believe that health care professionals no longer see an operating budget expansion as the outcome of a resource-mobilization campaign, but rather as the result of meeting facility goals.

In addition, the number of EPSs running budget deficits decreased between 1991 and 1997. In 1991, 18 out of 20 EPSs recorded operating budget deficits of between 1 percent and 84 percent; only 12 EPSs ran deficits in 1997. Seven EPSs have almost eradicated their budget shortfalls (in the 3-to-84 percent range). Six EPSs have reduced their deficits since 1991, and 6 others have seen theirs worsen. Some budget deficits are explained by increases in production costs attributable to higher input costs, introduction of new technology, and persistent inefficient operation of certain health care and diagnostic facilities. However, the gap is gradually narrowing in most EPSs as all players become more cost conscious. Budgeting on a departmental basis has made staff members more accountable for the financial consequences of their activities. Despite initial negative reactions, there is now more constructive criticism from all concerned and commitment to tracking costs in their departments.

Although the steady rise in copayment levels is often perceived in negative terms, it appears that acceptance is growing among the populace that copayment for services is a legitimate financing means, and that subsidies to help the poor should be operated to benefit only the poor.
Impact

Evaluation of the impact of reform is still hampered by a shortage of hard information, particularly on unit costs.

Impact on the Health System

The entire package of hospital reforms has increased the supply of services and productivity without any perceptible impact on equity.

Equity and Accessibility

Reductions in the length of stay have enhanced access to university hospitals by ensuring speedier turnover of hospital beds. As for outpatient care, introducing afternoon consultations and alternatives to hospitalization has also improved access, but there is still some work to be done in terms of organization.

Low-income citizens who qualify for free or reduced-cost health care still use EPSs as much as ever. Under the Free Medical Care System, 130,000 households with limited incomes still receive care. For individuals subject to copayment (those entitled to reduced rates and social security insureds), all increases were imposed simultaneously with income increases under the government’s salary and wage policy, in an attempt to reduce any financial impact of the copayment increases.

EPS activity grew between 1991 and 1997. Outpatient services rose by 32 percent, and hospital admissions, by 18 percent; however, they now seem to be leveling out. Access to university hospitals has improved: bed availability rose as the average length of stay fell and as alternatives to hospitalization improved access to ambulatory care. At the same time, productivity rose: the consultations-to-admissions ratio rose by 12.5 percent, average length of stay fell by one day, and bed turnover rose by 9 percent.

Effectiveness

EPS general performance indicators indicate an overall improvement in effectiveness. The increase in the number of hospitalizations
helped reduce admission waiting lists. The decline in inpatient stays made 900 extra EPS beds available. Hospital services significantly improved as a result of building renovation, replacement of medical equipment, and the introduction of a maintenance strategy.

Use of inpatient capacity also improved. Between 1992 and 1997, the bed-turnover rate increased from 34 to 37 patients per bed, while the bed-occupancy rate stayed at 75 percent. In addition, a new organizational approach to the use of major equipment (e.g., MRI units, scanners, cardiac catheterization units) allows them to be shared by different hospitals.

Recovery of receivables from third parties also improved, allowing additional resources to be mobilized and adding to the EPSs’ own revenue.

**Productivity**

Resource flows grew by 3.3 percent between 1991 and 1997, enabling several EPSs to wipe out or reduce their deficits. This growth rate, which was less than the increase in activity, nonetheless enabled EPSs to handle the increased activity while also improving patient care.

Human resource mobilization by the EPSs in all categories rose by only 2.3 percent a year. Excluding management, the target of concerted additional recruitment efforts, this rate drops to only 1.9 percent, whereas business developed much faster. This may denote an increase in employees’ workload and an improvement in their productivity.

**Quality**

Because the data necessary to construct indicators to monitor EPS clinical quality are not yet available, changes in the quality of care cannot be fully assessed. Nonetheless, consumer quality has improved, especially in regard to patient admissions, board, and lodging as a result of investments in these areas. Auxiliary services (e.g., beds and bedding, preparation and distribution of meals) have also improved since the contracting out of kitchen activities under the
technical supervision of EPS nutritionists and hygienists. In addition, training and education initiatives have improved in-house management of hospital waste and led to improvement in the hospital environment.

**Sustainability**

To last, reform has to be politically, economically, institutionally, and socially viable. There has been gradual expansion in the reforms’ content and geographical scope, indicating growing commitment and acceptance of the reforms. The population is generally believed to view the changes positively, as these changes have improved both the quality of services and access to them and have not led to the elimination of services.

There is evidence of a swing in the attitudes of EPS personnel toward acceptance of the reforms. This gradual change is a result of consistent political support, extensive sensitization and information programs, prompt and appropriate adjustments whenever necessary, and judicious resolution of internal conflicts.

**Economic and Financial Feasibility**

Financial sustainability is not a serious issue since the government retained control over budgets, investments, health care charges, and payment arrangements. Thus, the health sector operating budget (excluding payroll) has developed in step with available public resources (table 13.3). In fact, allowing for annual depreciation of 10 percent between 1991 and 1997, the budget has grown by an annual average of 3.3 percent. As for payroll increases, the government has kept a tight lid on both salaries and job numbers.

At the hospital level, expenditures are now controlled through prescription monitoring, daily patient drug logs, and use of therapeutic guidelines. Some EPS Medical Committees have formed therapeutic subcommittees to systematically review prescriptions identified as “unusual” by hospital pharmacies. Certain expensive di-
agnostic procedures (e.g., scans, magnetic resonance imaging) are also monitored.

Other aids to close the deficit include more successful cost recovery as a result of personnel training; more flexible management of loans; rate and copayment increases; and, since 1996, additional social security funding. Budgeting procedures are also becoming increasingly sophisticated, enabling negotiations with EPSs to include elements of performance evaluation. It is now possible to precisely estimate each hospital’s real self-financing capacities.

The impact of hospital reforms on fast-rising health costs is difficult to judge. Between 1991 and 1997, the overall nonpayroll operating budget for the EPSs increased 15 percent a year (average, at current prices). This increase was covered by state allocations and the EPSs’ own income, including billing for services to patients covered by CNSS. Cost recovery accounted for 30 percent of the increase in the EPSs’ own revenue.

This increase in public expenditure remained in line with overall budgets. In fact, the portion of the MPH budget, incorporating both operations (including payroll) and investments, fell from 7.16 percent of the national budget in 1992 to 6.95 percent in 1997, and rose from 2.49 percent to 2.64 percent of GDP over the same period. These

Table 13.3  Changes in EPS Operating Budgets

<table>
<thead>
<tr>
<th>YEAR</th>
<th>TOTAL BUDGET (IN MILLIONS OF DINARS)</th>
<th>PERCENTAGE CHANGE, YEAR TO YEAR</th>
<th>PERCENTAGE CHANGE, 1997-91</th>
<th>AVERAGE ANNUAL PERCENTAGE CHANGE</th>
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<td>38.82</td>
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<td>44.480</td>
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<td>49.923</td>
<td>12</td>
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<td>56.279</td>
<td>13</td>
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<tr>
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<td>67.956</td>
<td>21</td>
<td></td>
<td></td>
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<tr>
<td>1997</td>
<td>80.733</td>
<td>19</td>
<td>129</td>
<td>15</td>
</tr>
</tbody>
</table>

n.a. Not applicable. EPS government-owned health corporation.
Source: Ministry of Public Health, Tunisia.
figures include all revenue of the public health facilities, 95 percent of it from private expenditure.

*Risks for the future.* Risks include both systemic and implementation factors. The main recurrent risk is that the primary reform objective—identifying the actual cost of services and pricing services to reflect cost—may not be achieved and instead may become an accounting exercise. Further raising of copayments might, in the medium term, limit access to health care. The increased emphasis on controlling costs without the ability to monitor quality may have an adverse impact on quality of care.

Systemic factors presenting risks include the trend toward the centralization of decisionmaking, which may undermine hospital administrators’ credibility, and the interdependence of hospital performance with other elements in the chain of health sector services. Implementation matters are also important: delays in reorganizing supervisory arrangements at MPH headquarters and in defining the new missions of the regional public health authorities may slow reform.

The emphasis placed on the university hospitals was justified and timely. However, their performance is inextricably bound up with the performances of all the other elements in the health service chain. By continuing to direct resources toward these EPSs, Tunisia may dislocate the health system and undermine the credibility of other sector agencies, thereby producing the opposite effect of the one intended.

**Conclusions**

Reform has produced a number of positive results, which now need consolidation. It has also left areas needing improvement.

**Positive Results**

Positive results can be found in financial management, deployment of management staff, availability of reliable statistics, renewal of in-
Financial management. The resource constraints of the university hospitals led to the introduction of ways of controlling expenditure and mobilizing additional resources, especially through the collection of receivables. The introduction of billing for social security produced excellent results in terms of control of procedures and the injection of supplementary financial resources into the hospital system.

Availability of reliable statistical information. Since the reform process began, the MPH has kept up-to-date statistical information on EPS operations, although it is still fairly general in nature. All statistics on activities and resources communicated by the EPSs are used as the basis for budgetary negotiations with the EPSs themselves and with the social security funds.

Infrastructure renewal. The package of reforms included a program to modernize the technical facilities of university hospitals and to reorganize maintenance. A previously thorny problem has thus been resolved, improving the environment for patient care.

Management organs. The development of the Governing Boards and Medical Committees in the hospitals, while problematic, did have positive effects. It encouraged members of the hospital community to work together and with the outside world to determine their hospitals’ priorities. The boards and the Medical Committees began to jointly examine their hospitals’ problem areas and to seek solutions to their difficulties.

Areas Needing Improvement

Despite the progress from these reforms, some shortcomings remained to be corrected.

Revision of EPS payment arrangements. An important element of the incentives that the 1992 reforms did not address was the payment...
arrangements. In 1996, changes were at last made in the way EPS operating budgets are funded. These changes were based on the principle that the EPSs are providers of services and must recoup their operating costs for treating patients from different sources of funding. The process began with social security fund contributors and will gradually be extended to the other population groups covered by the state.

Changes in social functions. Subsequent to the 1992 reforms, the authorities revised the conditions for entitlement to free health care. Processing and management have been transferred from the MPH to the Social Affairs Ministry, which maintains up-to-date records on needy population groups. CNSS has been given responsibility for processing applications for reduced-rate care to encourage the public to join social security programs.

Failure to fully develop the concept of EPS autonomy. Transfer of power from MPH headquarters or the regional public health authorities to EPS management proved difficult, and, as noted, led to centralization. Inefficiency and lack of credibility were cited as conditions requiring comanagement by the supervisory authorities. If management is ever to be delegated to the hospitals, then hospital management capacity will need to be increased. Under the current organizational structure, the MPH could easily delegate more autonomy to individual EPSs that demonstrated they could effectively manage their own planning, organization, assessment, and monitoring.

Shortcomings of the MPH supervisory authority. Like the hospitals themselves, the central MPH in Tunis has accumulated its own management experience and traditions, which are very hard to change, although everyone concerned recognizes that the current organization is obsolete. Apprehension continues to feed sluggishness regarding the transition from a vertical organization, structured around resources, to a functional horizontal organization, integrating all the operational components of the public health facilities. In
order for the MPH to cease its direct intervention in hospital administration, there will have to be more development of the needed indirect mechanisms (such as performance contracts) to hold autonomous hospitals accountable.

**Lessons Learned**

Tunisia’s experience with health care reform has resulted in the following lessons:

- Involve sector professionals and all sector constituencies in the reform design process.
- Define and implement a communication strategy from the start of the reform process that targets all sector constituencies.
- Define the political, strategic, and operational goals of reform and the criteria to be used in determining whether the goals were accomplished.
- Assign specific management responsibilities for implementation in advance of initiating reform measures.
- Include feedback loops in reform management to allow necessary adjustments and flexibility in view of implementation experience and changes in the external environment.
- MPH role and methods of interacting with and guiding the hospitals must be consistent with the envisioned level of autonomy—otherwise, they will undermine the reform.
- Develop incentives and qualifications criteria to ensure recruitment of appropriate reform managers.
- Ensure stability in the units involved in reform by avoiding staff turnover.
- Promote information exchange between and among providers and the Central MPH.
- Conduct continual staff training and institutional development.
• Ensure that the focus of all action in health care institutions is on patients.

Notes

1. See chapter 1 of this volume for a description of these types of reforms.


4. However, public hospitals do have an advantage in the competition, namely, that physicians, pharmacists, and dentists interested in academic careers must practice in the public sector. In addition, public hospitals generally have access to new technology and major equipment, which makes them more attractive to physicians.

5. This was the PCU for the World Bank project that provided technical assistance to support the reform process.


8. All the therapeutic measures recommended for a given pathology. They are circulated in a review called Consensus, published by MPH since June 1997.
CHAPTER 14

Autonomization in Indonesia: The Wrong Path to Reduce Hospital Expenditures

Samuel S. Lieberman and Ali Alkatiri

In the early 1990s, Indonesia initiated far-reaching organizational reforms in 61 of its public hospitals, in response to a fiscal crisis and sharp cuts in the health budget. In these reforms, selected government-owned hospitals were permitted to operate as largely autonomous institutions, according to specified rules and understandings. A core component of the reform was for these hospitals to increase their reliance on private funding. The government hoped to be able to shift budgetary resources toward lower level curative and preventative care. While some positive results were achieved, the primary objective of decreasing government spending on hospitals was not. Therefore, a decade later, policymakers, disenchanted with the swadana (autonomous) approach to hospital reforms, are looking for better options.

Swadana Hospitals: Goals, Modalities, and Results

At the end of 1989, Indonesia had 327 public hospitals, divided among four types or classes. At the lowest level, there were 182 Class
D hospitals. Class D hospitals provide general services, and often do not have specialist physicians or laboratory and x-ray services. The 120 Class C general hospitals are designed to provide specialist services in internal medicine, obstetrics and gynecology, and pediatrics. Both Class C and D hospitals are largely rural and are province- or district-owned. Most of their funding comes from higher levels of government, as well as external sources. The funding that comes to these hospitals is earmarked, and must be spent in its intended category. Funds for construction, equipment, and training costs are allocated as “development funds” by the Ministry of Health (MOH). Separate funding streams come from the MOH for building and equipment maintenance and operations, salaries (of centrally appointed staff), and the costs of medicines and other consumables. While provincial and district governments supplement these funds with some allocations for salaries, other routine expenditures, and some investments, the centrally allocated revenues are typically much larger. Hence, unlike the situation in most countries, local governments here typically derive significant revenues from their public hospitals, creating some rather strong and perverse incentives vis-à-vis hospital governance.

Class B hospitals usually operate 10 specialty departments, and are centrally owned and administered. Two Class A hospitals are highly specialized referral centers and are also centrally owned and administered. These are very large facilities, and combined have 2,900 beds.

In all classes, any fee-based income the hospitals receive must be channeled directly to the central, provincial, or district bodies that own the facilities.

Slightly older figures on other facilities indicate that in 1983/84, there were 115 facilities operated by other ministries and parastatal entities, as well as 175 private hospitals and 80 hospitals run by non-governmental organizations (NGOs). Private and NGO-owned facilities accounted for roughly 40 percent of Indonesia’s total hospital bed capacity.

The five-year plan for 1984/89 (Repelita IV) was intended to focus on the hospitals needed to back up the fledgling network of largely rural health centers and affiliated service units. Improved referral ar-
rangements and capacity were seen as preconditions for increasing service use by the poor—policymakers had been aware for some time that government hospital services benefited middle- and upper-income families disproportionately. During this period, the share of government health expenditure devoted to hospital investment was projected to rise sharply, while outlays on the health center network were to account for a much lower proportion of sector spending. Priority was to be given to improving the Class C and D hospitals, which would then provide technical support to nearby health centers and handle an increased referral flow from them. The longer term strategy, beyond 1989, was to convert and upgrade the remaining Class D hospitals into Class C facilities so that they could provide the general referral and support complement needed by rural health centers.

Because of the oil shock–induced fiscal crisis that began in 1986, overall health development and public hospital spending fell in real terms by nearly two-thirds in 1986/87 and again by the same proportion in 1987/88, as the MOH focused on meeting the large and rising recurrent cost obligations associated with a decade of hospital and health center expansion. Health development expenditures began to recover in 1988/89 and reached precrisis levels by the early 1990s.1 Despite the focus on recurrent spending, a 1990 internal MOH study found that maintenance, staff performance, financial and hospital management, and quality assurance remained unsatisfactory in many hospitals.2

Confronted with increased fiscal constraints, the Indonesian government limited construction of new public hospitals, and focused on priority recurrent spending and operations in existing Class C hospitals. At the same time, the MOH developed new policies to try to create accessible and affordable health services for the entire population, including the poor. These initiatives included efforts to integrate health planning and budgeting at the district level, experiments with health cards as a means of targeting subsidized services to the poor, and a supportive stance toward expanding private health insurance and testing managed care and other prepayment arrangements to expand health spending by local communities. The government
also made regulatory changes to encourage domestic, and later foreign, private investment in the hospital sector.

**Reform Design**

The policy package that emerged in the late 1980s also included organizational reform of publicly owned hospitals. The reform was aimed primarily at securing additional private resources for health, thereby freeing up government funds for reallocation to promotive, preventive, and other public health services.

Under the reforms, public hospitals meeting certain criteria were formally converted to autonomous status (Lembaga Swadana, LS). The government set specific criteria for transforming to swadana status, recognizing that not every hospital had the capacity to operate successfully under the looser rules. Hospitals were eligible if the cost-recovery rate had increased during the previous three years and exceeded 40 percent, if their bed occupancy rate (BOR) 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 MOH or local government officials was also required.

Swadana hospitals received some decision rights previously held by the MOH. They were authorized to increase or reduce certain fees, for example, and were allowed to retain resultant revenues. Their residual claim on these revenues was constrained, however, in that the hospitals were only allowed to use fee-based revenues for certain purposes. They could use fee-based revenue 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, but not on, for example, civil works and equipment. Fee-based revenue could also be spent on recruitment of new employees, staff incentives, and contracts with private service providers, which increased the hospitals’ flexibility to manage human resources. These revenues had to be integrated, together
with conventional government grants and payments, into the annual funding proposals to central, provincial, or local authorities.

Despite increased flexibility, personnel management is still highly constrained in swadana facilities. Hospital staff remained civil servants, so most decision rights over staff, including hiring and firing, remained with the MOH.

The swadana reforms expanded market exposure primarily in two areas. First, hospitals could contract with private providers, subjecting their relations with at least some doctors to market forces. More significant, their increased reliance on fee-based revenue greatly enhanced their exposure to pressure in the market for their services.

The reforms did not provide for any new or reformulated accountability mechanisms, perhaps because of the fairly limited decision rights that were transferred to the swadana hospitals.

In addition to improving staff morale and motivation, it was also hoped that the reforms would make hospital services more accessible and affordable for the poor. And so, besides mobilizing additional private funds and reducing government subsidies to the hospital sector, the reformed hospitals were tasked with the important social function of providing services to the poor. The plan was to accompany the swadana initiative with an important complementary reform—to introduce more transparent means of subsidizing hospital services for the poor. As a further protection, the MOH mandated that Class III wards, which provide the most basic services for the lowest fees (box 14.1), account for at least half the beds in each LS facility.

Implementation, Outcomes, and Possible Determinants

Implementation. An enabling presidential decree was enacted in 1991, and the first swadana hospitals were selected for pilot testing the same year. Implementation began in five hospitals in Java, one provincially owned and run and the rest under central MOH management. Another 11 hospitals, owned and managed by provincial and district governments, were given swadana status in 1993. By 1997, 61 hospitals were operating on swadana principles. These in-
cluded 13 general hospitals and 2 specialized hospitals owned by the MOH. In addition, 46 hospitals, owned and run by provincial or local governments, had been converted—36 of these facilities were in Java. Of the rest, 6 were Class B facilities, including 4 in Sumatra. Outside Java, there were only the Class C swadana hospitals, and 2 of them were in Sumatra. Based on early results, some policymakers were predicting that the next five-year development plan would provide for extensive replication of the swadana approach.

**Impact.** The reforms have been evaluated through various case studies. The studies include an initial assessment by A. Gani; follow-up reviews by T. Bossert and colleagues, a review mission funded by the U.S. Agency for International Development (USAID) a team led by R. Malik; and a further look at facility-level outcomes conducted as part of the present study.

Gani’s evaluation was based on visits in 1995 to West Java's Tangerang and Sumedang hospitals, which were part of the second

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**Box 14.1 Ward Classes and Internal Cross-Subsidies in Indonesian Public Hospitals**

As in many East Asian public hospital systems, including Hong Kong and Singapore, Indonesia relies on a tiered price structure for hospital services according to the ward in which the patient is located. The pricing policy in Indonesian public hospitals is to set Class I ward fees above actual costs, Class II ward fees equal to actual costs, and Class III fees below actual costs. Clinical services are intended to be the same across the wards. However, hotel services are differentiated, to encourage the better-off to opt for the higher price, Class I ward regime. This structure provides for subsidies to flow from the hospitals better-off patients to its poorer patients, and constitutes, in essence, a very decentralized mechanism for risk pooling.
cohort of facilities converted to swadana status in 1993. He concluded that the swadana approach had succeeded in increasing hospital revenue substantially and improving service quality, while sustaining the use of facilities by the poor.  

Subsequent reviewers were somewhat less enthusiastic than Gani about the impact and usefulness of the swadana reform. The 1997 assessment by Bossert and coauthors looked at 5 facilities, 4 of them in the initial group of swadana hospitals. The sample also included 3 provincial or district hospitals that had not been run along swadana lines, and 2 private hospitals. The 15 hospitals evaluated by Malik and colleagues in 1997 included swadana and nonswadana facilities. Reference is also made to the 1998 USAID review of swadana performance in the Dr. Suradji Hospital in Klaten in Central Java.

The sample for the present study consisted of six swadana units (two owned by the MOH, one province-owned, and three district-owned) and one traditional district hospital. These facilities were visited in 1998. Results from these case studies are summarized below according to different performance dimensions.

**Fee Increases**

Managers of swadana hospitals can decide on fees, including daily charges for the use of beds in the (VIP) Class I and II wards. In our survey, we found that the fees set in different swadana hospitals vary substantially by service class within, as well as between, the facilities. User charges by ward class also rose at different rates in the period 1994/95 to 1997/98. For example, Fatmawati Hospital increased room charges in its VIP wings substantially in 1995/96, while little change was observed in the VIP or other wards of Hasan Sadikin Hospital (tables 14.1 and 14.2). Similar findings emerged for the sample reviewed by Bossert and colleagues.

**Funding, Expenditure, and Subsidy Trends**

Fee-based income increased in all of the hospitals, swadana and non-swadana, in this study due to increased bed charges and relatively inelastic consumer demand. The rise in income was largest in
Table 14.1  Class III Bed Charges before and after Swadana (in rupiahs)

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— Not available.

Note: Shaded area indicates period of corporatization.

Source: Data collected from sample hospitals.
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<td>Super VIP</td>
<td>66,722</td>
<td>90,243</td>
</tr>
<tr>
<td>VIP</td>
<td>66,722</td>
<td>90,243</td>
</tr>
<tr>
<td>Class I</td>
<td>66,722</td>
<td>90,243</td>
</tr>
<tr>
<td>Class II</td>
<td>40,577</td>
<td>20,360</td>
</tr>
<tr>
<td>Class III</td>
<td>40,577</td>
<td>20,360</td>
</tr>
</tbody>
</table>

— Not available.

Source: Data collected from sample hospitals.
Banyumas Hospital (table 14.3). Revenues also rose sharply in Cianjur Hospital, a nonswadana facility. What was surprising was that rising fee-based revenues in MOH-owned facilities were accompanied by increased outlays, supported by subsidies from the Indonesian government, directed mainly at construction of new wards and equipment upgrades (tables 14.4 to 14.6). A similar result was seen in the province- and district-owned hospitals, including the nonswadana Cianjur facility but excluding the swadana Banyumas facility. Thus, increased subsidy flows to reformed as well as nonreformed hospitals was seen in most of the cases. Bossert and his coauthors noted the same results regarding subsidy trends. Moreover, the USAID review team found that the long-running swadana pilot in the Dr. Suradji Hospital in Klaten also benefited from continuing substantial budgetary support from the MOH.

**Physical Outcomes and Efficiency Trends**

Swadana hospitals appeared to improve efficiency. Bed occupancy rates and other efficiency indicators rose in the swadana hospitals we examined (table 14.7). Bossert and coauthors and Malik and his team reported similar findings.

**Service Quality**

Standards of service and patient satisfaction are notoriously difficult to measure. All facilities covered in this study established total

### Table 14.3 Increase in Sample Hospital Revenues, by Year (percent)

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hasan Sadikin</td>
<td>60</td>
<td>18</td>
<td>13</td>
</tr>
<tr>
<td>2</td>
<td>Fatmawati</td>
<td>22</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>Syaiful Anwar</td>
<td>41</td>
<td>25</td>
<td>29</td>
</tr>
<tr>
<td>4</td>
<td>Serang</td>
<td>35</td>
<td>52</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>Banyumas</td>
<td>70</td>
<td>41</td>
<td>33</td>
</tr>
<tr>
<td>6</td>
<td>Karawang</td>
<td>38</td>
<td>30</td>
<td>42</td>
</tr>
<tr>
<td>7</td>
<td>Cianjur</td>
<td>27</td>
<td>22</td>
<td>25</td>
</tr>
</tbody>
</table>

*Note: Shading denotes nonswadana.*
*Source: Data collected from sample hospitals.*
Table 14.4 Hospital Revenues and Subsidies, by Year (in millions of rupiahs)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hasan Sadikin</td>
<td>7,098.0</td>
<td>11,384.0</td>
<td>13,360.0</td>
<td>15,171.1</td>
</tr>
<tr>
<td>Fatmawati</td>
<td>9,625.1</td>
<td>11,339.1</td>
<td>13,444.0</td>
<td>16,282.0</td>
</tr>
<tr>
<td>Syaiful Anwar</td>
<td>3,134.1</td>
<td>4,466.0</td>
<td>5,214.0</td>
<td>6,768.0</td>
</tr>
<tr>
<td>Serang</td>
<td>3,140.0</td>
<td>4,237.0</td>
<td>6,578.0</td>
<td>7,039.1</td>
</tr>
<tr>
<td>Banyumas</td>
<td>1,087.1</td>
<td>1,701.2</td>
<td>2,459.9</td>
<td>3,213.4</td>
</tr>
<tr>
<td>Karawang</td>
<td>2,656.5</td>
<td>3,664.6</td>
<td>4,764.7</td>
<td>6,713.0</td>
</tr>
<tr>
<td>Cianjur</td>
<td>703.5</td>
<td>896.3</td>
<td>1,197.0</td>
<td>1,530.0</td>
</tr>
</tbody>
</table>

Source: Data collected from sample hospitals.
quality-management programs with wide staff involvement, backed by quality assurance and medical committees. Moreover, this sample of swadana facilities developed standard operating procedures covering medical interventions as well as financial and reporting activities. Karawang Hospital initiated the use of patient surveys and other feedback mechanisms, a sign that at least some hospitals were starting to focus more on consumer quality.

**Personnel Developments and Incentive Payments**

There were some improvements in staff behavior, probably as a result of management ability to structure the incentive payments, and to contract with private providers. We compared staff remuneration in two facilities, one run on swadana principles (Karawang Hospital) and one on traditional (Cianjur Hospital). The swadana approach appears to have had little impact on staff pay packages overall (table 14.8). However, interviews revealed that staff incentive packages seem to have been better designed in the swadana facility. Hospital and personnel directors in the swadana hospital felt that staff discipline and motivation had improved, while absenteeism had fallen. Similarly, Bossert and colleagues\(^\text{15}\) found reduced absenteeism as well in swadana hospitals. But despite increased flexibility, personnel management remains constrained in swadana facilities. This is because the hiring and firing of hospital staff members who are civil servants remain a responsibility of the MOH.

### Table 14.5 Beds in Sample Hospitals, by Year

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hasan Sadikin</td>
<td>882</td>
<td>958</td>
<td>925</td>
<td>951</td>
</tr>
<tr>
<td>Fatmawati</td>
<td>564</td>
<td>569</td>
<td>582</td>
<td>598</td>
</tr>
<tr>
<td>Syaiful Anwar</td>
<td>760</td>
<td>760</td>
<td>744</td>
<td>753</td>
</tr>
<tr>
<td>Serang</td>
<td>272</td>
<td>272</td>
<td>272</td>
<td>272</td>
</tr>
<tr>
<td>Banyumas</td>
<td>180</td>
<td>200</td>
<td>220</td>
<td>235</td>
</tr>
<tr>
<td>Karawang</td>
<td>167</td>
<td>167</td>
<td>167</td>
<td>207</td>
</tr>
<tr>
<td>Cianjur</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>152</td>
</tr>
</tbody>
</table>

Source: Data collected from sample hospitals.
Table 14.6 Total Hospital Expenditures per Bed, by Year (in millions of rupiahs)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rupiahs</td>
<td>Per Bed</td>
<td>Rupiahs</td>
<td>Per Bed</td>
</tr>
<tr>
<td>Hasan Sadikin</td>
<td>21,671.0</td>
<td>24.6</td>
<td>34,953.6</td>
<td>36.5</td>
</tr>
<tr>
<td>Fatmawati</td>
<td>19,536.7</td>
<td>34.6</td>
<td>22,240.5</td>
<td>39.1</td>
</tr>
<tr>
<td>Syaiful Anwar</td>
<td>12,980.2</td>
<td>17.1</td>
<td>14,970.3</td>
<td>19.7</td>
</tr>
<tr>
<td>Serang</td>
<td>3,497.5</td>
<td>12.8</td>
<td>5,240.7</td>
<td>19.3</td>
</tr>
<tr>
<td>Banyumas</td>
<td>1,574.8</td>
<td>8.7</td>
<td>2,160.2</td>
<td>10.8</td>
</tr>
<tr>
<td>Karawang</td>
<td>3,573.6</td>
<td>21.4</td>
<td>4,504.3</td>
<td>26.9</td>
</tr>
<tr>
<td>Cianjur</td>
<td>740.1</td>
<td>4.9</td>
<td>851.7</td>
<td>5.7</td>
</tr>
</tbody>
</table>

Source: Data collected from sample hospitals.
Table 14.7 Bed Occupancy Rates in Sample Hospitals

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hasan Sadikin</td>
<td>62.3</td>
<td>63.1</td>
<td>63.1</td>
<td>63.4</td>
<td>63.9</td>
<td>62.3</td>
<td>63.0</td>
</tr>
<tr>
<td>2</td>
<td>Fatmawati</td>
<td>67.6</td>
<td>69.0</td>
<td>69.5</td>
<td>74.9</td>
<td>75.3</td>
<td>77.7</td>
<td>72.2</td>
</tr>
<tr>
<td>3</td>
<td>Syaiful Anwar</td>
<td>62.9</td>
<td>63.9</td>
<td>61.2</td>
<td>61.7</td>
<td>59.1</td>
<td>57.7</td>
<td>58.0</td>
</tr>
<tr>
<td>4</td>
<td>Serang</td>
<td>65.4</td>
<td>70.3</td>
<td>74.3</td>
<td>54.5</td>
<td>70.3</td>
<td>78.2</td>
<td>75.3</td>
</tr>
<tr>
<td>5</td>
<td>Banyumas</td>
<td>81.2</td>
<td>80.6</td>
<td>85.6</td>
<td>82.0</td>
<td>86.0</td>
<td>90.0</td>
<td>92.5</td>
</tr>
<tr>
<td>6</td>
<td>Karawang</td>
<td>65.7</td>
<td>58.2</td>
<td>57.5</td>
<td>57.4</td>
<td>64.7</td>
<td>78.2</td>
<td>84.3</td>
</tr>
<tr>
<td>7</td>
<td>Cianjur</td>
<td>58.3</td>
<td>52.4</td>
<td>57.5</td>
<td>62.6</td>
<td>63.4</td>
<td>63.0</td>
<td>69.2</td>
</tr>
</tbody>
</table>

Note: Shading denotes period of reformed status.
Source: Data collected from sample hospitals.

Utilization and Equity

As noted above, the Class I wards are used by wealthier patients, who effectively subsidize the third-class beds that are assumed to be used by the poor. Prices for services to patients in Class III wards must be approved by the MOH for centrally owned hospitals and by local legislative bodies for facilities owned by local governments. Thus, stated fees in Class III wards showed negligible increases in the hospitals studied, swadana and nonswadana (table 14.1), and the intended

Table 14.8 Trends in Average Incentive Package, by Staff Category (in rupiahs)

<table>
<thead>
<tr>
<th>CATEGORY OF STAFF</th>
<th>STAFF INCENTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>KARAWANG HOSPITAL</td>
<td></td>
</tr>
<tr>
<td>Medical staff</td>
<td>42</td>
</tr>
<tr>
<td>Nurses and paramedics</td>
<td>288</td>
</tr>
<tr>
<td>Administrative staff</td>
<td>171</td>
</tr>
<tr>
<td>Total</td>
<td>501</td>
</tr>
<tr>
<td>CIANJUR HOSPITAL</td>
<td></td>
</tr>
<tr>
<td>Medical staff</td>
<td>24</td>
</tr>
<tr>
<td>Nurses and paramedics</td>
<td>180</td>
</tr>
<tr>
<td>Administrative staff</td>
<td>128</td>
</tr>
<tr>
<td>Total</td>
<td>332</td>
</tr>
</tbody>
</table>

Source: Data collected from sample hospitals.
cross-subsidization seems to have been achieved (table 14.2). The MOH requires that Class III beds not fall below 50 percent of the total—placing a floor on how much hospitals may reduce their money-losing beds and patients. However, the number (and share) of Class III beds did appear to fall in some swadana hospitals (table 14.9). For example, the share of Class III beds in total bed capacity in Fatmawati fell from 65 percent in 1994/95 to 55 percent in 1997/98. Accordingly, the net impact on the poor remains unclear.

### An Overview of the Swadana Initiative

In short, several assessments of the performance of swadana hospitals have arrived at similar findings, namely, that the swadana approach has not made major advances toward goals related to hospital financing, access for the poor, personnel management, service quality, and patient satisfaction.

<table>
<thead>
<tr>
<th>Table 14.9 Occupancy Rates in MOH-Owned Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>WARD CLASS</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>HASAN SADIKI</td>
</tr>
<tr>
<td>VIP</td>
</tr>
<tr>
<td>Class I</td>
</tr>
<tr>
<td>Class II</td>
</tr>
<tr>
<td>Class III</td>
</tr>
<tr>
<td>Special class</td>
</tr>
<tr>
<td>Total/average</td>
</tr>
<tr>
<td>FATMAWATI</td>
</tr>
<tr>
<td>VIP</td>
</tr>
<tr>
<td>Class I</td>
</tr>
<tr>
<td>Class II</td>
</tr>
<tr>
<td>Class III</td>
</tr>
<tr>
<td>Special class</td>
</tr>
<tr>
<td>Total/average</td>
</tr>
</tbody>
</table>

BOR Bed occupancy rate
Source: Data collected from sample hospitals.
Yet this does not mean that individual swadana hospitals have “failed.” On the contrary, facility managers have shown they are capable of using their discretionary powers to alter the range of services offered to their customers and to raise fees and increase revenues from patients. There are also indications that steps have been taken to improve staff benefits and morale and to increase service quality in swadana units. However, these measures have not been used to underpin the broad reforms of the public hospital sector that were envisaged in the late 1980s. In particular, the swadana initiative has not reduced the subsidies provided to many government-owned hospitals—public hospitals have continued, even during a major financial crisis, to absorb a fifth or more of the health budget. This support has continued despite continuing staffing misallocations and imbalances, facility underutilization by all income groups but especially the poor, and other indicators of inefficiency.

Accounting for these seemingly disappointing results is not difficult. The swadana initiative began to extract public hospitals from the maze of regulations, procedures, understandings, and expectations associated with being integrated units of the MOH. As discussed, measures were adopted to alter the governance (i.e., the way the MOH and other owners interacted with their hospitals) of a small but not insignificant number of public hospitals. These reallocations of decision rights gave facility managers wider discretion in crucial spheres such as setting user fees, which resulted in enhanced exposure to various market pressures, including the demand for services from publicly owned health insurance companies. These factors also allowed management to make further adaptations, which changed the incentives faced by staff and patients, as well as other stakeholders of swadana hospitals.

All these steps were not strong enough, however, to substantially relieve the problems with the public hospital sector. For instance, while certain gains in efficiency and service quality were apparent in the swadana hospitals, the government was unable to parlay this development into making reduced subsidies available to participating hospitals. And the impact of the reforms on services to poor patients is not clear. While swadana facilities had to maintain half their beds
for the use of subsidized (i.e., money-losing) patients, it's not clear how many services these patients actually used.

Looking back then, Indonesia’s swadana measures lacked the coherence and critical mass needed to engender desired changes in facility-level behavior and performance. Reformed hospitals were granted only limited decision rights, were only weakly exposed to market pressures, and were expected to fund significant social costs. With such limited and inconsistent changes in the external and internal incentives environments, it is perhaps surprising that the swadana approach yielded any results at all.

The outcomes associated with the swadana initiative will not come as a surprise to anyone who followed health sector trends and policies in Indonesia in the 1990s. Until the 1997 economic crisis, public resources allocated to health increased at a satisfactory rate, loosening some of the budget constraints experienced in the late 1980s. And with funding less restrictive (until 1997), implementation of the swadana approach could afford to advance in a gradual and selective fashion, while the MOH proceeded to exercise significant constraints on the discretionary authority of swadana facility administrators. For example, crucial decisions with respect to personnel, such as the number and reimbursement of permanent staff, were not devolved to the hospital level, while facility managers were obligated to serve many poor patients who generated far fewer revenues than they cost. In addition, it seems that MOH authorities used increased flows of support, at least to centrally run hospitals, as a means of making swadana more palatable to hospital staff. Moreover, MOH leaders did not lobby aggressively for swadana principles within the ministry itself and in policy and budget discussions with the Ministries of Finance and Planning. Officials in both ministries were never convinced that swadana was an indispensable element within a coherent and realistic program of health financing and service reforms. Similarly, decisionmakers within the Ministry of Home Affairs and in its attached hierarchy of provincial and district governments remained unreceptive to the swadana approach, which was seen as a direct threat to the handsome revenues typically derived from public hospitals. Nor did MOH policymakers convince their counterparts...
in Finance and Planning to eliminate the salary, drug, and other subsidies that allowed local governments to obtain large hospital revenues while putting relatively limited funds into these facilities.

Further, the important complementary reform to explicitly fund services provided to poor patients never went beyond the pilot phase. This significant setback forced the hospitals to continue to deal with these responsibilities internally or implicitly.

Other efforts to rationalize the channeling of funds to provincial and district governments and to give local authorities greater discretion in health planning have proceeded very slowly, as have experiments with different forms of prepaid financing of hospital and other health services.

**What Next for Hospital Reform in Indonesia?**

This chapter should not be read as an obituary for the swadana approach. Indeed, Indonesian experience indicates there is nothing intrinsically wanting in the framework of marketizing organizational reforms. Hospital managers have demonstrated their readiness and capacity to play a more active role in managing their operations, and to make decisions to lead their hospitals to a sustainable financial footing.

Moreover, the goal of increasing revenues to provide additional support for public health interventions and services targeted at the poor is even more pertinent during the current crisis. But rolling out the swadana form to additional public hospitals must be accompanied by complementary reforms, especially with regard to funding services for the poor.

Swadana status, in its current form, is certainly not sufficient to move the hospitals into effective and stable operation in the present setting—it may not even be a necessary element of a reform package. This is because constraints on government health spending promise to be even more restrictive and longer lasting than what prevailed in the late 1980s. The swadana reforms as noted above were not able to
contribute to a reduction in public hospital funding, which must be a core part of any envisioned reform in the current situation.

Other important differences between the present context and the one a decade ago include the increased role of private hospitals and the insurance sector and the growing strength of provincial and district governments. Private hospital capacity has continued to expand and now comprises more than a third of general hospital beds, up from a quarter in the mid-1980s. And private hospitals have begun to exercise policymaking clout. At the same time, availability and affordability of high-quality hospital services cause concern among private health insurance companies. Increasingly, the MOH is being reminded of its important but largely unfulfilled regulatory functions as regards public and private hospitals. Finally, the role and place of swadana principles are sure to reemerge as provincial and district governments are handed increased responsibilities and reduced central transfers for health services. Local authorities and their constituents will have to decide whether retaining ownership of hospitals, even if managed on a swadana basis, is in the public interest. So the future of a swadana approach depends on strategies and decisions at the central level, within the MOH and the key funding ministries, and likely most of all at the provincial and district levels.

At the central level, the issue is no longer how fast to replicate swadana in the remaining MOH-run hospitals. The key question is rather why the MOH needs to continue owning and managing any hospitals, whether run on a swadana basis or not. A plausible option would be for the MOH to transfer all of its hospitals to provincial and local governments, including the few general facilities it still operates and the 14 mental and other specialized hospitals it owns and manages. This transfer of facilities would proceed with some handing over of budgetary support (i.e., Operational and Maintenance Budget for Hospital [OPRS] funds as well as resources coming through other channels). This support is scheduled to decline sharply over a three-year period, to be replaced by a funding channel that would support hospitals according to the poverty, remoteness, and other salient characteristics of their service areas. Mean-
while, Indonesian government support for such hospital functions as research on key health issues and training medical students could be secured through direct, competitive grants to local government–owned facilities and also private hospitals. Finally, the MOH would need to quickly strengthen its regulatory capacities vis-à-vis local government- and privately owned hospitals, and regarding its technical assistance and health advocacy roles.

The agenda at the local (provincial and district) government level is even more challenging. Faced with possibly declining real health transfers from the Indonesian government (except in more impoverished or remote areas), local authorities will have to decide whether it makes sense for them to own and operate hospitals, including the 60 general and specialty hospitals handed over by the MOH. The swadana approach has not appealed thus far to local officials who feel that autonomy would reduce flows of hospital-generated revenues. The likely decline in centrally channeled hospital subsidies will force a reassessment of the need to retain control of local hospitals and will increase the attractiveness of the swadana approach. However, direct support to private and NGO-run hospitals may emerge as a more tractable and attractive option. In this scenario, province- and district-owned hospitals, whether run on swadana principles or not, would be contracted out, fully privatized, or merged with existing privately owned hospitals.

Notes

1. F. Saadah, S. Lieberman, and M. Juwono, Indonesian Health Sector Expenditures during the Crisis: Have They Been Protected?, Watching Brief 5 (Jakarta: World Bank, East Asia and Pacific Region, August 1999).


8. Gani, “Improving Quality in Public Sector Hospitals in Indonesia.”

9. Johnson et al., “Assessment and Lessons Learned from the Klaten Integrated Health Care Reform Field Trial.”

10. Bossert et al., *Hospital Autonomy in Indonesia*.

11. Ibid.

12. Johnson et al., “Assessment and Lessons Learned from the Klaten Integrated Health Care Reform Field Trial.”

13. Bossert et al., *Hospital Autonomy in Indonesia*.


15. Bossert et al., *Hospital Autonomy in Indonesia*.

Despite political and social turmoil, Ecuador has made steady progress toward reforming its health system since the mid-1990s. Nevertheless, its health indicators are still below those of other countries at a similar level of development. The infant mortality rate of 29 per 1,000 live births is twice as high as in Chile, and maternal mortality, at 150 per 100,000 live births, is three times higher than in Costa Rica. Higher exposure to risk factors and limited access to effective medical care puts an especially heavy burden on the poor.

Ecuador is trying to direct its limited resources, over the short term, to the spots where they will do the most to reduce mortality and morbidity. The Ministry of Public Health (MPH) has targeted a set of key public health interventions directed at specific maternal, childhood, and adult problems. This approach is intended to avoid the pitfalls of classical universality, whose promise of “everything for everyone” has proven unsustainable—even in the richest countries. Over the longer haul, to help create a more equitable, efficient, and integrated system, Ecuador is trying to separate financing from delivery of health care in the public sector and is also seeking changes in institutional configuration and management.
The Health Reform Framework

With support from the World Bank–financed FASBASE and MODERSA projects as well as from other international agencies, broad policy and institutional reform proposals have been designed and adopted. These proposals, which enjoy a high degree of consensus among sectoral stakeholders, build upon laws enacted for reforming the Ecuadorian state as a whole.

Legal Framework for Health Reform

A major change in the government view of the health sector was stated in the 1998 Constitution, adopted on August 10, 1998. The state explicitly guarantees health promotion and protection through food safety, water supply, and basic sanitation. It also guarantees uninterrupted access to health services in accordance with principles of equity, universality, solidarity, quality, and efficiency. For people who cannot pay, health services will be provided in public facilities, and no one will be denied emergency services. The Constitution also stipulates that the National Health System, consisting of public, autonomous, private, and community-based entities, will be deconcentrated, decentralized, and participatory.

The centralized functions of the MPH cover policymaking, norm setting and regulation of health care, and coordination of public health measures. Within the institutional framework set forth in the Health Code, the Municipalities Law empowers the municipalities, within their jurisdictions, to regulate and deliver water for human consumption and sanitation and, in coordination with MPH, to regulate hygiene and related health matters, including the clean operation of businesses dealing with food and public buildings.

Two complementary laws were enacted during the 1990s to provide an enabling framework for decentralizing and implementing organizational reforms in the health system. They are the 1993 Law for Modernization of the State, Privatization, and Delivery of Public Services by the Private Sector and its Regulations; and the 1997 Decentralization and Social Participation Law. Under these
legal instruments, the central government transferred its powers and functions under the decentralization and deconcentration regimes:

- **Decentralization** is “a transfer of functions to a functionally or geographically decentralized entity, and . . . includes also the power to create new entities to discharge functions which were originally centrally assigned.” It consists of the delegation of political, economic, administrative, and financial management powers and duties from the central government to subnational governments (provincial or municipal). Executive decrees are required for such decentralization.

- **Deconcentration** consists of the delegation of administrative and financial functions from the central government to its own dependencies. In this framework, the ministries are required to delegate their powers and responsibilities within economic or geographic regions and through ministerial resolutions. The only specific requirements they must meet are that the legal framework specify the geographic scope (boundaries) where the delegate will act and that the Ministry of Finance and Public Credit give prior approval of the necessary budgetary transfers.

**Recent measures.** To operationalize these mandates, presidential decrees and ministerial resolutions were issued in the first quarter of 1999, allowing a transfer of authority in decisionmaking from the MPH to the provinces and from the provincial health authorities to the hospitals and health areas. These key legal measures will affect the success of the reform. A presidential decree in June 2001 made the decentralization of the health sector to the municipalities operational. Municipalities are responsible for requesting the health services to be decentralized. Since each municipality can ask for the transfer of a different subset of health service provision to its jurisdiction, the process can lead to greater entropy. The MODERSA project is working closely with the MPH and the national Modernization Council (CONAM) in helping municipalities fully under-
stand the costs and benefits of the resource and responsibility transfers they request. Health care is the first sector to receive this delegation of authority.

**Political and Administrative Decentralization**

A major step in the decentralization process has been the integration of public and private providers into the Municipal Integrated Health Care Networks (MHCN), which involve substantial community participation. These networks are managed by a Consejo or Junta de Salud (Health Board) that coordinates services and information among health providers in order to guarantee the delivery of essential health care interventions. The Health Boards are responsible for developing a local health plan (including organization and financial arrangements); classifying and registering health care users; developing new health care financing mechanisms (e.g., a local health fund); and supporting the modernization of management structures and practices (information, quality-control mechanisms, human resources).

Several instruments have been essential for public and private integration of service delivery. First, the Health Boards determined the scope of the basic health package and the number of people covered, and specified its components according to the region’s epidemiological characteristics. The package was then priced following cost manuals generated in the MODERSA project. For delivery of basic package interventions, private providers are also recruited via public tenders and brought in under contract, especially in areas where public providers are few. The contracts and procedures used (also provided by MODERSA) specify the mode of payment, incentives, and quality-control mechanisms.

The Decentralized Health System in Tena Canton is a good example of decentralization with strong community participation (box 15.1). Performance agreements (compromisos de gestión) are the main instruments that MODERSA is supporting as incentives to public providers to improve service quality and efficiency. Emphasis on public health targets is also expected to improve equity.
Box 15.1 Decentralized Health System in Tena Canton

The Junta de Salud was established on November 7, 1997. Its structure includes a Health Assembly with political control, a Board of Directors with managerial power, and a Technical Team, responsible for delivery. Decentralization required legal instruments such as the ministry-level agreement with the Municipality of Tena, and an ordinance to delegate power to the Junta de Salud.

A first plan was constructed, based on citizen participation through canton-level assemblies, rural workshops, technical workshops, topic-specific agreement boards, consultations, and opinion polls.

This junta has four components: Healthy Lifestyles and Environment (involving promotion, prevention, and community participation); a Services Network (organization and enrollment of users, entitlement of services, hospital modernization, and consolidation of the fluvial system); a Support System (management, information, and human resources); and the creation of the Fondo Local de Salud.

The Fondo de Salud classifies and registers people, defines the basic package and its cost, establishes a subsidy and copayment system, manages the fondo’s operations, and contracts with registered providers.

The subsidy and copayment system came up with an interesting innovation. It allows for six potential discount cases, based on socioeconomic evaluation: 0 percent, 25 percent, 50 percent, 80 percent, 90 percent, and 100 percent. For the Ecuadorian system as a whole, only four cases are possible: a 0 percent, 25 percent, 50 percent, or 100 percent discount. This shows that, if given enough flexibility, local juntas may be able to work out more precise classifications and appropriate discounts, which almost guarantee both cost recovery and efficiency gains.

(Box continues on the following page)
On the basis of extensive discussions with the key players in the system (Junta de Salud, provider network, users), draft performance agreements have been prepared in Cuenca and Tena. These are expected to be signed in May 2002. These agreements specify the services that the provider networks are expected to deliver to a defined population over a period of one year. Specific targets are set for every six months, when an evaluation committee of the Junta de Salud assesses compliance. Providers meeting the agreed targets are rewarded with payment incentives.

**Economic Decentralization and Hospital Reform**

Recent decentralization and state modernization laws have opened opportunities for reforming public hospitals. Although many public hospitals need substantial improvements, the MPH, with support from MODERSA, has also set up some hospital autonomy demonstration models. To move the public hospital sector toward more autonomous decisionmaking, the pilot autonomy initiative has been expanded to eight hospitals, and modernization agreements have been signed with them. The two original hospitals were the Enrique Garces Hospital in the south of Quito and the Vicente Corral Mos-
coso hospital in Cuenca. Two additional pilot hospitals are Guayaquil hospital and the Eugenio Espejo Hospital in Quito, a teaching hospital affiliated with the Central University Medical School. The arrangement with Eugenio Espejo adds an interesting dimension to the autonomy initiative, as the medical school has a large degree of autonomy, but its teaching hospital has not. Four additional provincial hospitals are being selected.

The government considered six options regarding hospital autonomy, ranging from keeping the status quo to enacting a law mandating autonomy for public hospitals. An intermediate option was chosen, whereby a few pilot hospitals would enter into performance agreements with the MPH (at the provincial or national level). Performance agreements between the pilot hospitals and the provincial health authorities are the first step toward linking financing with production. These hospitals operate under a Board of Directors and a general director appointed by the board. The MPH Task Team will closely monitor the implementation of these far-reaching measures, delegating to the four pilot hospitals decision-making authority on organizational, financial, personnel, and procurement matters now concentrated in the hands of the ministers of health and of finance.

**Deconcentration instruments.** The deconcentration of management and administrative functions from the MPH to hospital directors, leading to the hospitals’ gradual autonomy, is done through ministerial resolutions, issued as each hospital qualifies to participate under the MODERSA project. The most important powers transferred are: contracting for goods and services, as authorized by the domestic procurement law; approving payment of budgeted expenditures under specific contracts; and planning and monitoring implementation of investments for hospital improvements.

**Hospital modernization and selection.** Decentralization included the modernization of public hospitals—their organization and governance structure, management practices, management information systems—and improvements in health care quality over the medium term. Hospital modernization was also to include: implementing au-
tonomous managerial arrangements, including user participation; strengthening planning and decisionmaking; developing human resources through selective training and continuing education, performance incentives, and career development; implementing financial administration systems and management information systems; revamping cost-recovery policies and systems and developing new resource allocation mechanisms for hospital care; and financing civil works, equipment, maintenance, and supplies for refurbishing and upgrading existing facilities.

Modernizing institutions with strongly entrenched traditions and weaknesses requires experimentation and the careful selection of candidates for change. The MPH selected the initial demonstration hospitals using the hospital management assessment instrument. This evaluation assessed seven key areas: senior management capabilities; strategic planning; information systems; accounting and financial management; human resources and labor relations; facilities and equipment; and relationships with the community and with other providers. Other factors for selecting hospitals for the project were: having powers transferred from the MPH to hospital directors via an MPH resolution with deconcentration of authority provision; classifying hospitals as provincial or national hospitals; choosing a hospital director and staff willing to accept changes in organization and financial management and improvements in quality; using a hospital with strong influence in its region and credibility to serve as a model; providing a signed agreement between the hospital director and the MPH, with endorsement of respective provincial/municipal authorities, to undertake modernization changes; and ensuring that a hospital was willing to be part of a “learning network” of other hospitals included in similar change processes.

Accounting, reporting, and cost recovery. Cost recovery in public hospitals is an important policy option that benefits both the health system and the public that uses it. With demonstrated improvements in quality, Ecuador’s MPH could eventually recover a significant part of recurrent costs. To this end, support is provided the demonstration hospitals to develop a revised system, including legal safeguards, for
charging and collecting fees and managing revenues from user charges. The MPH has developed a fee schedule that includes both total estimated costs and reference fees (tarifas referenciales) for each intervention (table 15.1).4

Because the blind use of such fees might have a regressive effect, the MPH allows hospitals to proportionately adjust the fee schedule according to regional circumstances. Moreover, a socioeconomic categorization of user procedures was designed to apply discounts to the user fees, according to family characteristics (box 15.2).

Promoting allocative efficiency in hospitals. The current budgeting system in MPH hospitals does not promote allocative or technical efficiency.5 Budgets are based on historical spending patterns, not on the hospital’s output. Changing the method of paying hospitals is one possible way of improving both their technical and allocative efficiency. To this end, the MODERSA project supports development of a payment methodology; implementation of “shadow prices” to acquaint hospitals with reimbursement based upon output; and gradual implementation of new hospital financing methodology. For example, initially the payment rate would be set equal to the total hospital budget divided by the total number of discharges. All participating hospitals would receive the same payment rate. The uniform payment rate would be used until it could be refined to include factors such as case mix, cost of living, and perhaps hospital-specific

<table>
<thead>
<tr>
<th>PROCEDURE</th>
<th>COST</th>
<th>TOTAL REFERENCE FEE</th>
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</thead>
<tbody>
<tr>
<td>Cholecystitis (surgical)</td>
<td>270</td>
<td>110</td>
</tr>
<tr>
<td>Appendicitis (surgical)</td>
<td>700</td>
<td>280</td>
</tr>
<tr>
<td>Gastrointestinal endoscopy</td>
<td>260</td>
<td>104</td>
</tr>
<tr>
<td>Normal birth</td>
<td>650</td>
<td>260</td>
</tr>
<tr>
<td>Elective caesarean birth</td>
<td>1,000</td>
<td>400</td>
</tr>
<tr>
<td>Tonsil extraction</td>
<td>444</td>
<td>200</td>
</tr>
<tr>
<td>Prostate biopsy</td>
<td>485</td>
<td>194</td>
</tr>
</tbody>
</table>

*Source: Ministry of Public Health, Reglamento al Decreto Ejecutivo 502, Funcionamiento de Comités de Participación Social y Control de la Gestión en Servicios de Salud, Anexo 1, Tarifario Referencial, Quito, 1999.*
factors. This initial payment rate would supposedly accustom hospi-
tals to working under a per-case administration payment system. It
would not be used to pay hospitals, only to simulate what a hospital
would receive under a per-discharge system. It would also allow time
to refine the payment method.

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**Box 15.2 Socioeconomic Classification of Health Care Users in Ecuador**

The Ecuadorian government adopted criteria to classify users of public health facilities in May 1999. This classification required information about residence (urban/rural; transportation; owned dwelling; access to water, sewerage, electricity, and phone); education (household head, number of children attending school or university, type of school); household demographics (female-headed, number of dependents, disability, chronic diseases); and occupation and income (job location, household income, durable goods, financial assets). Questions on each item were weighted from 0 to 210 points. Public subsidies were applied as follows.

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>POINTS</th>
<th>PAID BY USER (PERCENT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>&lt; than 50</td>
<td>Free service</td>
</tr>
<tr>
<td>B</td>
<td>50–100</td>
<td>25 percent of reference fee</td>
</tr>
<tr>
<td>C</td>
<td>101–125</td>
<td>50 percent of reference fee</td>
</tr>
<tr>
<td>D</td>
<td>126–180</td>
<td>100 percent of reference fee</td>
</tr>
<tr>
<td>E</td>
<td>&gt; 180</td>
<td>100 percent of total cost</td>
</tr>
</tbody>
</table>

Individuals holding a Bono Solidario are entitled to Category A. Individuals enrolled in public or private health insurance correspond to Category E.

*Source: Ministry of Public Health, Reglamento al Decreto Ejecutivo 502, Funcionamiento de Comités de Participación Social y Control de la Gestión en Servicios de Salud, Anexo 1, Tarifario Referencial, Quito, 1999.*
Improving hospital governance. Key stakeholders agree that important hospital decisions should be made closer to the population served to improve flexibility and responsiveness to the specific needs of Ecuador’s diverse geographical areas and population groups. To improve decisionmaking in hospitals, the following measures have been implemented:

- A decisionmaking framework has been developed to support greater autonomy of selected public hospitals by redefining the relationship between the MPH and the provincial and municipal Health Boards or Councils, autonomous health entities, and individual hospitals, with respect to key hospital governance decisions.

- One or more governance models have been implemented to allow regional authorities and local communities to share greater responsibility for governing and managing demonstration hospitals.

- Improved management processes have been designed and implemented, supported by management information systems, including total quality management initiatives, that would support strengthening cost accounting, and improving performance, measurement, and reporting systems in the demonstration hospitals.

- Hospital management educational programs have been designed and established to train individuals for positions as senior hospital and health system leaders, managers of clinical and administrative departments, and technical support staff.

- The educational program infrastructure in hospital and health system management have been strengthened.

Human resource management. Overall, the MPH concentrates 23.2 percent of its labor force in health services; the Ecuadorian Social Security Institute (IESS), 11.7 percent; and other private, for-profit institutions, 35 percent. Out of 16,000 physicians in Ecuador, the MPH and IESS account for about 6,600 physicians in the system compared with 6,000 in private health provider businesses. The main human resource–management problems are the lack of labor
incentives to improve the quality of health service; the inability of hospital directors to choose an appropriate labor mix between administrative and medical personnel; and the lack of a career profile in the public sector. These problems are determining factors in the high turnover of qualified personnel, the percentage share of public and private jobs, and other unresolved labor arrangement problems.

With the support of the MODERSA project, decentralization is encouraging output-based incentives—which still require legal instruments—that delegate power to hospitals for hiring, managing layoffs, making decisions on training, and developing information systems to organize these decisions. Since the project involves other public and private institutions, contracts with providers specify appropriate incentives and accountabilities. The process is intended to move the incentive system from one based on fixed salaries and budgets to a system where providers and users share risks, and salaries reflect those risks (partial- and full-capitation).

The experience of Colinas del Norte suggests some avenues for strengthening reform in human resources management (box 15.3).

Conclusions

The success of health care reforms in Ecuador, as in other countries around the world, depends on consensus on the major directions and principles of reform. The government that took office in Ecuador in August 1998, building on the previous government’s efforts, began to attack the most critical bottlenecks in the system, but delays in implementing the reforms occurred with the change of administration in January 2000. Sets of interventions have been adopted to establish new organizational models for public health care delivery while cultivating support for a broader reform agenda among the different sectoral actors, particularly for health insurance reform. Experience in other countries shows that this strategy offers the greatest probability of success in the reform endeavor, particularly in country situations characterized by high political instability and a lack of policy and institutional continuity.
Box 15.3 A Public HMO: Community System for Integral Health in Colinas del Norte

The Community System for Integral Health (Sistema Comunitario de Salud Integral, SICSI) in Colinas del Norte builds on the Municipal Health Council model and seeks to improve the incentive environment in which health workers and service recipients interact. It targets one neighborhood with about 2,000 families north of Quito. The SICSI operates like a small, public health maintenance organization (HMO) in which families pay small monthly fees to become members of a clinic. Physicians are paid their usual monthly base salary plus bonuses for each new member family and for each individual attended and service rendered.

A physician in a project clinic receives a basic monthly salary independent of productivity. For each new paying affiliated member family, the physician receives a monthly bonus of 0.1 percent. This encourages physicians to help sell the program in the communities they serve and, quite likely, to treat members better than nonmembers. In addition, physicians are paid for each service rendered, within certain limits. They receive s/1,250 per consultation up to a limit of s/500,000 (400 consultations) a month. Finally, no more than 40 percent of the additional pay for consultations may relate to morbidity, leaving 60 percent for “public health” consultations.

For US$2.50 a month, affiliated families receive a comprehensive array of health services, including preventive care, pediatric care, and pre- and perinatal care. The local clinic is the main point of contact but has referral rights to the local hospital. By contrast, unaffiliated families are served in the traditional manner—in a system with copayments for most services. In the first four months of the

(Box continues on the following page)
Constitutional change has opened a real window of opportunity for pushing the health care reform agenda in Ecuador. These changes strengthen the policymaking and regulatory role of the MPH within the health system while reaffirming public and private participation in the delivery of health services within a decentralized context. However, major medium- and long-term institutional building efforts will clearly be required to make the proposed policy and institutional reforms fully operational in the Ecuadorian health system. Evaluations to measure the impact of reform will have to be part and parcel of these efforts.

Notes

1. Other international agencies supporting health care reform in Ecuador include the U.S. Agency for International Development,


4. Reference fees include only operational costs, excluding medical personnel expenses.


7. Lucio and Lasprilla, “Costos y eficiencia de los Servicios de Salud en el Ecuador a 1999.”
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
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<tbody>
<tr>
<td>Accountability</td>
<td>Responsibility for achieving objectives and reporting on activities.</td>
</tr>
<tr>
<td>Accountability, funding or payment</td>
<td>Responsibility for achieving objectives that is generated by the structure of compensation for services.</td>
</tr>
<tr>
<td>Accountability, ownership</td>
<td>Responsibility for achieving objectives that is created through the governance relations between the government-owner and the organization (i.e., corporate plan, performance contract).</td>
</tr>
<tr>
<td>Agency theory</td>
<td>Highlights the mechanisms used to reconcile divergent interests among individuals under conditions of widespread uncertainty and uneven access to information. An agency relationship is one in which one person (the agent) acts on behalf of another (the principal). For example, an employee is an agent on the employer’s behalf; a doctor is an agent on the patient’s behalf.</td>
</tr>
<tr>
<td>Allocative efficiency</td>
<td>A situation in which resources cannot be reallocated to achieve more of one objective without accepting less of another.</td>
</tr>
<tr>
<td>Autonomization</td>
<td>A reform of a public organization that shifts day-to-day decisions from supervisory agents in the hierarchy to the management of the organization (“letting managers manage”).</td>
</tr>
<tr>
<td>Bilateral monopoly</td>
<td>Bilateral monopoly is the combination of a monopoly market (single seller) on the selling side and a monopsony market (single buyer) on the buying side. A market dominated by a profit-maximizing monopoly tends to charge a higher price. A market dominated by a profit-maximizing</td>
</tr>
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</table>
monopsony tends to pay a lower price. When combined into a bilateral monopoly, the buyer and seller are forced to negotiate a price. The resulting price could end up anywhere between the higher monopoly's price and the lower monopsony's price. Where the price ends up depends on the relative negotiating power of each side.

**Board (or “company board”)**

Group of individuals, formally constituted in a supervisory role over an organization. Board members represent individuals or entities outside an organization that have interests in the organization's performance—either as dispersed owners (shareholders) or other stakeholders. The board functions to concentrate the more intense supervisory responsibilities among a small number of representatives to reduce the cost of overseeing the firm, and to enable some specialization by board members. In public organizations, the boards may also be used as a means to “regularize” supervision of the organization, enhance transparency, and depoliticize decisionmaking.

**Business case**

A tool that supports planning and decisionmaking, including decisions about whether to buy, which vendor to choose, and when to implement. Business cases are generally designed to answer the question: What will be the financial consequences if we choose X or do Y? A good business case shows expected cash flow consequences of decisions, over time, and it includes the rationale for quantifying benefits and costs. Critical success factors and significant risks will be discussed, if relevant. The case also describes the overall impact of a proposed initiative in terms of net cash flow, discounted cash flow, payback period, and internal rate of return.

**Capex**

Funds used by a company to acquire or upgrade physical assets such as property, plant, or equipment become fixed assets on your balance sheet. This can include everything from repairing a roof to building a fire escape.

**Capitation**

Payment system whereby managed-care plans pay health care providers a fixed amount per insured person to provide care to a group of patients for a defined period. Under this system, providers are not paid for services that exceed the allotted amount of costs. In the United Kingdom, for example, covered persons register with a general practitioner, selected from a list of registered and participating GPs, who receive a fixed monthly fee from the National Health Service for each person registered with him or her. See also provider payment arrangements.
<table>
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<tr>
<th>Term</th>
<th>Definition</th>
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<tr>
<td>Contestability</td>
<td>The existence of competition “for the market,” whereby potential suppliers are compelled to bid competitively for the right to be the sole supplier of a service for a defined length of time. While holding this right, the supplier will be a monopoly provider, yet it faces competition for that right at regular intervals—hence the market is “contestable” but not competitive.</td>
</tr>
<tr>
<td>Contracting reforms</td>
<td>Reforms that shift public resource allocation in health from automatic funding transfers to organizations, based on historical resource use for contracts that create commitments to deliver specific services and other outputs.</td>
</tr>
<tr>
<td>Control group approach</td>
<td>Comparison of behavior and performance among reforming hospitals with behavior among hospitals presumed to be unaffected by the reform, allowing attribution of observed differences to the reform.</td>
</tr>
<tr>
<td>Corporatization</td>
<td>A reform of a public organization that reproduces some elements of private sector business structure in an attempt to engender the efficiency of private corporations while assuring continued emphasis on social objectives through public ownership.</td>
</tr>
<tr>
<td>Counterfactual</td>
<td>What would have happened without the reform. Comparing the counterfactual with the actual will provide insights about a reform’s impact.</td>
</tr>
<tr>
<td>Cream skimming</td>
<td>Selection of healthy patients who need less treatment than other patients and therefore cost less.</td>
</tr>
<tr>
<td>Decentralization</td>
<td>Form of organizational reform that shifts decision-making control, and often revenue rights and responsibilities, from central to lower level government agencies.</td>
</tr>
<tr>
<td>Decision rights</td>
<td>The managerial prerogative to make decisions about aspects of an organization’s activities—including procurement, use of inputs, scope of activities, financial management, clinical management (hospitals), nonclinical administration (hospitals), strategic management, market strategy, sales, and the production process.</td>
</tr>
<tr>
<td>Diagnostic-related group (DRG)</td>
<td>A patient classification scheme that provides a clinically meaningful way of relating the number and types of patients treated in a hospital to the resources required by the hospital. DRGs constitute a payment system that reimburses health care providers a fixed amount for all care in connection with a standard diagnostic category. The system is a form of case-rate payment.</td>
</tr>
</tbody>
</table>
Dial settings

Shorthand for the aggregate status of the five key components of the incentive regime for a reformed hospital: magnitude of a hospital’s decision rights; the extent of a hospital’s residual claims to net revenue; balance between indirect and direct (hierarchical) accountability mechanisms; magnitude of a hospital’s market exposure; and degree of explicitness of arrangements for social functions.

Economics of organization

Academic discipline that applies a variety of economic perspectives—especially principal agent theory, transaction cost economics, and property rights and public choice theory—to examine the effectiveness of different ownership and governance arrangements for structuring activities. The analytical focus is on the factors influencing the choice and design of organizational arrangements governing commercial transactions.

External financing limit

The amount of finance that an autonomous public entity may raise during the financial year through government grant or borrowing.

Externality

The impact on another entity or individual that a decision-maker does not take into account when making a decision.

Governance

The sets of rules or authority structures, either spontaneously evolved or externally imposed, that determine the manner in which organizations are managed and the nature of accountability of the managers to the owners.

Governance structure

A set of rules and institutions for administering an economic exchange relationship. The free market/common law is an example, as is common ownership with hierarchy.

Influence activities

Self-interested activities designed to shape others’ decisions. Within organizations (public as well as private), these are often aimed at redistributing rents and take the form of political activity or misrepresentation and distortion of information.

Influence costs

The costs incurred in attempts to influence others’ decisions in a self-interested fashion, in attempts to counter such influence activities by others, and in the degradation of the quality of decisions because of influence.

Institutions

Rules (formal and informal) and customs of a game or activity—the humanly devised and socially shared constraints that shape human interaction and the mechanisms by which these rules are enforced. Examples include marriage, licensing, burial customs, the contract, wage labor,
a currency, the handshake, weights and measures, and the budgeting process. Examples from the health sector include formal and informal norms regarding payment of hospitals and physicians, formal and informal norms regarding staffing, care giving, care seeking, prescription and use of medication. Encompasses both rules and organizations that shape and enforce these rules.

Institutional capacity

The degree to which the institutional structure supports desired behaviors of relevant individuals and organizations. In the context of a reform program, institutional capacity is the degree to which the existing institutional structure encourages the actions that further the reform.

Institutional mechanisms

Institutionalized mechanisms (such as competitive pay, prestige, contracting arrangements, or training procedures) influence the overall level of capability of an organization, for example, by influencing the supply of qualified labor and relevant expertise.

Institutional development

Changes made in the institutional framework to make it more conducive to economic development; alternatively, in the context of a reform program, changes made in the institutional framework to promote the desired policy actions and related behaviors of individuals and organizations.

Institutional framework

The “rules of the game” that determine the rewards associated with different kinds of knowledge, skills, and behaviors.

Integration, backward

When a firm establishes formal linkages or merges with another firm that is in the previous stage of the production-distribution process to increase efficiency and/or market power. Backward integration in health care often takes the form of an acute care facility linking to doctors or groups of doctors, to increase their referrals, and to dilute purchasers’ influence.

Integration, forward

When a firm establishes formal linkages or merges with another firm that is in the next stage of the production-distribution process to increase efficiency and/or market power. In health care, an example is when a provider integrates with the entities in the markets to which they refer patients, in order to capture part of the revenue from these referrals (e.g., diagnostic labs, pharmacies).

Integration, vertical

Integration with a buyer or supplier—as compared with horizontal integration, which is integration with a firm at the same stage of production.
Interventions (in evaluation)  The identified actions taken (e.g., clinical interventions, public health interventions, and policy intervention).

Managerial capacity  The way that management skills and organization combine with accountability arrangements to determine the capability of managerial staff to conduct key managerial tasks (e.g., directing, administering, and making decisions).

Market exposure  Extent to which an organization relies on earning its revenue in a market, where purchasers have choice, instead of relying on automatic financial transfers.

Marketizing reform  A set of planned, structural changes to public service organizations and their operating environment, that seek to improve incentives through creating or enhancing market pressures, especially those associated with the exercise of choice by the service user or payer.

Moral hazard  The form of postcontractual opportunism that arises when actions required or desired under the contract are not freely observable. Examples from health care include overuse of health services in response to third-party payment. In insurance, it refers to the insured’s tendency to relax attention to preventing events or losses covered by insurance.

Natural monopoly  A monopoly based on an incumbent firm’s overwhelming cost advantage stemming from access to some unique natural resources or past capital installations that a competitor would have to duplicate (e.g., a power grid).

Neoclassical economics  The mainstream approach to economics, which has involved primarily a single set of idealized rules governing market exchange. It has provided valuable insight into the fundamental nature of exchange and resource allocation in decentralized markets. However, the model has overlooked two areas of inquiry critical to health sector policy: how do alternative sets of rules and organizations affect performance, and why does the form of economic organization differ among activities?

New public management  Application of private sector management principles to the public sector. This approach often includes elements such as: shifting away from process accountability to accountability for results; devolution of management control combined with enhanced reporting and monitoring mechanisms; disaggregation of large bureaucratic struc-
tures into quasi-autonomous agencies; emphasis on monetary rather than nonmonetary incentives; and a stress on cost cutting and efficiency.

<table>
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<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Nondistribution constraint</td>
<td>A critical component of the governance framework for nonprofit organizations that supports the nonprofit essence and motivation of the organizations and their employees through blocking distribution of residuals to any individuals.</td>
</tr>
<tr>
<td>Organizations</td>
<td>The way individuals are structured to engage in an activity. Organizations are groups of individuals (or subordinate organizations) bound by some common purpose to achieve objectives. They have well-defined boundaries between what is inside and what is outside the organization. Examples include political parties, firms, churches, schools, and hospitals.</td>
</tr>
<tr>
<td>Organizational behavior</td>
<td>The set of formal and informal administrative rules and procedures for selecting, deploying, and supervising resources and undertaking activities in the most efficient way to achieve institutional objectives</td>
</tr>
<tr>
<td>Organizational reform</td>
<td>Changes to the constitution or structure of an organization, and hence the interaction of individuals inside the organization. Such changes are also likely to change the way the organization interfaces with other individuals and organizations—hence, organizational reform can change the institutional framework—by altering formal and informal norms of behavior between the organization and others.</td>
</tr>
<tr>
<td>Examples of organizational reform include</td>
<td>changing the organizational form of an entity (i.e., changing a firm from a proprietary or family-run business to a limited liability company; converting a state-owned company to private ownership; decentralization within public sector; and delegation of authority and accountability).</td>
</tr>
<tr>
<td>Organizational reform modalities, marketizing</td>
<td>Efforts to enhance the performance of public organizations by reducing direct government control and increasing exposure to market or marketlike incentives (autonomization, corporatization, or privatization).</td>
</tr>
<tr>
<td>Oversight, government</td>
<td>External government regulatory structure and activities to monitor and oversee subordinate or regulated entities.</td>
</tr>
</tbody>
</table>
| Performance budgeting                        | The process of funding in exchange for delivering certain services or products—where the amount of funding is
tied to explicit performance results and quality indicators (e.g., utilization, average length of stay, staffing ratios, infection rates).

Privatization  Transfer of a public hospital to nongovernmental ownership, either as a for-profit or nonprofit organization. The most extreme version of marketizing organizational reforms.

Property rights theory  This discipline examines property rights as an economic concept. It examines the range of organization and contract types as resulting from the attempts of individuals to maximize the value of their property rights.

Provider payment arrangements  The organization and structure of the system for funding or paying providers; may also include formula for price setting.

Public choice theory  Academic discipline focused on the behavior of public sector bureaucrats. While bureaucrats are supposed to work in the public interest, putting into practice the policies of government as efficiently and effectively as possible, public choice theorists see bureaucrats as self-interested utility maximizers, motivated by such factors as salary, prerequisites, public reputation, power, patronage, and the ease of performing duties. This discipline focuses on the importance of the political process in shaping and implementing policy.

Public corporation  Public corporations are government-chartered but governed by private rather than public law. They occupy a middle ground between purely private corporations and government agencies. They often operate with some sort of government backing or mandate, and enjoy explicit or implicit government financial guarantees. They may be exempt from national or local taxes. Such organizations are often established to run a nationalized industry or state-owned enterprise. A government minister usually appoints the chairman and board members.

Reflexive comparison  Making the implicit assumption that a hospital’s behavior and performance prior to an intervention would have continued unchanged, so that any differences are due to the reform.

Reform, funding and payment  Addresses system- or provider-performance problems by altering the structure of funding or payments to providers, usually by tightening the link between resource allocation and user or payer selections.
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<th>Definition</th>
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<tr>
<td>Reform, management</td>
<td>Efforts to strengthen managerial performance within the preexisting structural parameters through changes in recruitment, training opportunities, improvements in information systems to facilitate effective decisionmaking, and new management practices.</td>
</tr>
<tr>
<td>Reform, organizational</td>
<td>Efforts to improve performance by altering the structure of hospitals and relations with other parts of the health care system instead of by working within the system’s parameters.</td>
</tr>
<tr>
<td>Rents</td>
<td>A return received in an activity that is in excess of the minimum needed to attract the resources to that activity.</td>
</tr>
<tr>
<td>Reputational risk</td>
<td>The potential that negative publicity regarding an institution's practices or activities, whether true or not, will cause a decline in the customer base, costly litigation, or revenue reductions.</td>
</tr>
<tr>
<td>Residual revenue rights</td>
<td>Entitlement to whatever revenue remains after all funds have been collected and all debts, expenses, and other contractual obligations have been paid.</td>
</tr>
<tr>
<td>Residual rights of control</td>
<td>Entitlement to make any decisions regarding an asset's use not explicitly contracted by law or assigned to another by contract.</td>
</tr>
<tr>
<td>Sector neutrality (“level playing field”)</td>
<td>Environment in which government policies are not discriminatory and all companies in a given market must follow the same rules and are given an equal ability to compete.</td>
</tr>
<tr>
<td>Separation of provider payment reforms</td>
<td>Health sector reforms that seek to create a degree of competition among public providers through establishing distinct government organizations to undertake the funding/purchasing function and the provision function.</td>
</tr>
<tr>
<td>Service-profit chain</td>
<td>Conceptual approach to labor management in the service sector, under which employee productivity is perceived as deriving most directly from employee loyalty.</td>
</tr>
<tr>
<td>Social functions</td>
<td>Services or products priced and delivered below costs—either for distributional purposes or because of externalities in consumption.</td>
</tr>
<tr>
<td>Soft budget constraint (or “soft budgets”)</td>
<td>A situation under which public or private entities are operating, where the government is explicitly or implicitly liable for losses or budget overruns.</td>
</tr>
</tbody>
</table>
| Statistical approach                         | Relies on the assumption that measures of the most influential reform characteristics and of the exogenous...
environment are included in the available data or can be gathered.

**Strategic management**  
The proactive approach to management under which an organization determines its long-run direction and performance by formulating institutional objectives, undertaking ongoing internal appraisal, and analyzing management and functions. Strategic management also involves careful appraisal of the external environment, hence it includes evaluation of changing market conditions.

**Technological capacity**  
The ability of an agency, or group of agencies, to gather, assess, and share information. Related to its organizational structure, collective knowledge, and skill of staff, as well as adequacy of related technical resources, including information technology (hardware and software).

**Total factor productivity**  
The relationship between output and the aggregate of all inputs. In health care, usually measured as the number of patients served, or services rendered, per index unit of inputs.

**Transaction cost economics**  
Investigation of alternative governance structures, particularly the differences between the natures of markets (interorganizational relationships) and firms (intraorganizational relationships), to determine which governance structure, among a list of those available, is most efficient (production and transaction cost minimizing) for governing a given transaction or set of activities.
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