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# Brazil

## Enhancing Performance in Brazil's Health Sector

### Lessons From Innovations in the State of São Paulo and the City of Curitiba

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## CURRENCYEQUIVALENTS

Currency Unit = Brazil Reis (BRL)

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## GLOSSARY

Acolhimento Solidário		Friendly Welcome (paraphrase)
Agente Comunitário de Saúde	ACS	Community Health Agent
Associação Brasileira de Pós-Graduação em Saúde Coletiva		Brazilian Association of Graduates in Collective Health
Associação Nacional de Professores	NAHT	National Association of Head Teachers
Associação Saúde da Família		Association of Family Health
Associação Secundária de Professores	SHA	Secondary Heads Association
Atividades Programadas		Programmed activities
Autoridade Sanitária Local	ASL	Health Unit manager
Avaliação da Comunidade -		Community Evaluation (quarterly telephone survey of users)
Banco Inter Americano de Desenvolvimento	IDB	Inter-American Development Bank
Cargo Comissionado		Commissioned office (political appointment)
Cartão de Qualidade de Saúde		Health Quality Card
Celetistas		Employees covered by the CLT
Central de Atendimento ao Usuário	CAU	Citizen Service Hotline
Central de Marcação de Consultas Especializadas		Clearing House for Appointments for Specialized Consultations
Central de Procedimentos - doble		Clearing House for Appointments for Specialized Consultations
Central de Regulação		Clearing House for Regulation
Centro de Epidemiologia		Epidemiology Center
Centro de Vigilância Sanitária		Health District
Concurso Público		Competitive merit exam process to fill public sector job vacancy
Conselho Municipal de Saúde		Municipal Health Council
Conselho Nacional de Secretários Municipais de Saúde	CONASEMS	National Council of Municipal Health Secretaries
Consolidação das Leis do Trabalho	CLT	Consolidated Labor Laws
Declaração de Nascido Vivo - DN	DNV	Declaration of Live Births
Departamento de Desenvolvimento Social	DDS	Department of Social Development
Desenvolvimento Gerencial de Unidades Básicas de Saúde	GERUS	Managerial Development of Basic Units of Health

Vice-President, LCR: :	Pamela Cox
Director, LCC5C:	John Briscoe
Director LCSPR:	Ernesto May
Lead Economist:	Ethan Weisman
Actino Sector Manager	Fernando Rojas
Task Manager:	Jeffrey James Rinne

Estatutários		Statutory government employees covered by the RJU
Fundação Serviços Especiais de Saúde Pública	FSESP	Foundation for Special Services in Public Health
Gerente do Centro de Vigilância Sanitária		Health District Manager
Gestão Plena		Full Management
Gratificação Especial para Médicos	GEM	Special Bonus for Doctors
Instituto de Pesquisa e de Planejamento de Curitiba -Dobled	IPPUC	Research and Urban Planning Institute of Curitiba
Instituto de Pesquisa e Planejamento Urbano de Curitiba	IPPUC	Curitiba Research and Urban Planning Institute
Instituto Municipal de Administração Pública	IMAP	Municipal Institute of Public Administration
Laboratório Municipal		Municipal Laboratory
Lei de Diretrizes Orçamentárias	LDO	Budget Planning Law
Medicina com Base em Evidências	EBM	Evidence Based Medicine
Ministério da Administração Federal e Reforma do Estado	MARE	Ministry of Federal Administration and State Reform
Movimento de Reforma Sanitária		Healthcare reform movement
Nova Gerência Pública	NPM	New Public Management
Organização para Cooperação Econômica e Desenvolvimento	OECD	Organization for Economic Co-operation and Development
Organização Social	OS	Social Organization
Organizações Sociais de Saúde	OSS	Social Organizations in Health
Pesquisa de Rastreamento de Gestão Pública	PETS	Public Expenditure Tracking Survey
Plano Incentivo a Qualidade	PIQ	Quality Incentive Plan
Plano Operativo Annual	POA	Annual Operating Plan
Prêmio de Incentivo Especial	PI	Special Incentive Award
Produto Interno Bruto	GDP	Gross Domestic Product
Programa de Agentes Comunitários de Saúde	PACS	Community Health Agents Program
Programa de Incentivo ao Desenvolvimento da Qualidade dos Serviços	IDQ	Incentive Program for Quality Development
Programa Mãe Curitibana		Curitiban Mother Program
Programa Nacional de Apoio à Modernização da Gestão e Planejamento	PNAGE	National Program for Support of Modernization of Management and Planning
Programa Saúde da Família	PSF	Family Health program
Prontuário Eletrônico de Saúde		Electronic medical records system
Regime Jurídico Único	RJU	Single Juridical Regime
Reino Unido	UK	United Kingdom
Relação entre Desempenho e Salário	PRP	Performance-related pay
Secretaria Estadual de Saúde	SES	State Secretariat of Health
Secretaria Municipal de Saúde	SMS	Municipal Health Secretariat
Servidor estatutário		Public servant
Sistema de Informação Gerencial	SIG	Management Information System
Sistema Integrado de Serviços de Saúde	SISS	Integrated System of Health Services
Sistema Nacional de Saúde	NHS	National Health System
Sistema Único de Saúde	SUS	Unified Health System
Sistemas integrados de Serviços de Saúde - dobre	SISS	Integrated Systems of Health Services
Sociedade Paranaense de Saúde da Família	FAMIPAR	Family Health Society of Paarna
Termo de Compromisso de Gestão		Management Contract
Unidade de Saúde		Health Unit
Unidade de Tratamento Intensivo	UTI	Intensive Care Unit

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## Table of Contents

<b>EXECUTIVE SUMMARY .....</b>	<b>i</b>
Improving Public Sector Performance for Higher Quality Public Spending .....	i
Social Organization Hospitals in the State of São Paulo.....	ii
Primary Healthcare in Curitiba.....	iii
Overcoming Agency Problems: Conclusions and Policy Implications.....	v
<b>1. Improving Public Sector Performance for Higher Quality Public Spending .....</b>	<b>1</b>
Improving Service Delivery in Brazil .....	2
Healthcare Policy in Brazil.....	4
Managing Performance .....	5
Assessing Managerial Innovations in Brazil’s Health Sector .....	8
Case Selection .....	9
<b>2. Social Organization Hospitals in the State of São Paulo.....</b>	<b>11</b>
Introduction .....	11
Contracting for Healthcare in São Paulo’s OSS Model .....	11
Performance Differences between OSS and Direct Administration Hospitals .....	14
Human Resource Management in São Paulo’s Hospitals .....	16
Legal Basis of Employment .....	16
Multiple Jobs .....	18
Comparing Human Resource Management in OSS and Traditional Public Hospitals .....	19
Establishment Control and Staff Composition .....	19
Personnel Selection .....	21
Salary Determination.....	21
Performance Pay .....	23
Career Development.....	23
Performance Evaluation and Supervision .....	25
Disciplinary Actions.....	26
The Power of Informal Incentives (through formal and informal rules).....	26
Conclusions & Recommendations .....	30
<b>3. Managing Primary Care in the City of Curitiba .....</b>	<b>32</b>
Introduction .....	32
Primary Healthcare in Curitiba.....	32
The Approach to Public Healthcare .....	32
The Main Features of Management.....	37
Primary Healthcare Outcomes.....	37
The Evolution of the Primary Healthcare System .....	40
The Management of Primary Healthcare .....	43
Client Orientation .....	44
Managing Information.....	45
Specialization and Coordination .....	47
Managing Human Resources.....	48
Managing Performance .....	52
The Elements of Good Performance .....	56

The Environment for Performance I: SUS .....	58
The Environment for Performance II: Health Professionals' Networks .....	58
The Environment for Performance III: City Management .....	59
The Environment for Performance: a Confluence of Factors.....	63
Challenges for Performance .....	64
<b>4. Overcoming Agency Problems: Conclusions and Policy Implications .....</b>	<b>66</b>
Social Organizations as Corporatization .....	66
<i>Making the Managers Manage through Performance Contracts and Letting Managers</i>	
Manage through Flexibility .....	66
Corporatized Hospitals in São Paulo.....	67
Performance-Based Pay in the Public Sector .....	70
International Experience to Date .....	70
Pay for Performance in Curitiba: Not a Magic Bullet.....	74
Conclusions and Policy Implications .....	76
Clarity and Consistency of Purposes: Institutional and Informational Foundations .....	77
Managerial Flexibility or Organizational Development? .....	78
Lessons .....	79
Policy Implications.....	80
APPENDIX A. Hospitals in São Paulo Research Sample <sup>†</sup> .....	83
APPENDIX B. Research Questionnaires Applied in São Paulo Hospitals .....	84
APPENDIX C. Focus Group Interviews in São Paulo Hospitals .....	91
APPENDIX D. Survey Summary: Avaliação dos Incentivos aos Recursos Humanos na Atenção Primária em Saúde de Curitiba .....	93
APPENDIX E. Managing Curitiba's Public Health System: Instruments and Impacts .....	96
APPENDIX F. Selected Management Contract Targets by Health District in Curitiba, January - December, 2004.....	99
<b>BIBLIOGRAPHY .....</b>	<b>101</b>

## TABLES

Table 2.1: Patient Indicators of Allocative Efficiency in OSS & Direct Administration Hospitals, 2003.....	15
Table 2.2: Occupancy Rates by Hospital Type (among hospitals in study sample).....	15
Table 2.3: Mortality Rates in Direct Administration & OSS Hospitals, 2003.....	15
Table 2.4: Form of Employment by Medical Speciality in São Paulo's Public Hospitals, .....	18
Table 2.5: Forms of Employment (among hospitals in study sample) .....	18
Table 2.6: Staff Composition in Direct Administration & OSS Hospitals, 2003 .....	20
Table 2.7: Number of Employees per Hospital Bed (among hospitals in study sample) .....	21
Table 2.8: Average Elapsed Time between Initiating a Hiring Process & Employee Arriving to Work (among hospitals in study sample).....	21
Table 2.9: Comparing Employment Benefits (among hospitals in study sample).....	22
Table 2.10: Rates of Absenteeism .....	25

Table 2.11: Employee Turnover Rates (among hospitals in study sample).....	25
Table 2.12: Managerial discretion over human resource decisions, by hospital type.....	26
Table 3.1: Number of Public and Private Health Units in Curitiba, 2005 .....	33
Table 3.2: Municipality of Curitiba: Employment by Type of Unit and Type of Employee .....	34
Table 3.3: Municipality of Curitiba: Average Number of Staff Employed in Health Units by Type of Unit.....	36
Table 3.4: Comparison of Curitiba's Health Indicators with other Municipalities with similar epidemiologic and demographic profile,2004 .....	39
Table 3.5: Chronology of Events Related to Health Sector Management in Curitiba, 1941-2004 .....	40
Table 3.6: Curitiba: Population Growth, 1940-2005 .....	43
Table 3.7: Performance under the IDQ, 2002-2005 .....	51
Table 4.1: Four Types of Public Organization.....	71
Table 4.2: Replies to employee attitude surveys in selected public service organizations.....	73
Table 4.3: Local “Push” and “Pull” Factors in the Choice of Healthcare Performance Management Strategies .....	80
Table 4.4: Summary of Policy Instruments and their Incentive Effects in the Two Case Studies	82

## **BOXES**

Box 1.1: Social Organizations .....	4
Box 2.1: Why OSS hospitals appeared in São Paulo.....	14
Box 2.2: The special incentive award .....	24
Box 3.1: The Role of Protocols .....	46
Box 3.2: The IDQ Evaluation System .....	50
Box 3.3: Management Contracts – One Health District’s View .....	55
Box 3.4: Networks and Performance Incentives.....	60
Box 3.5: New Zealand Tries to Understand Curitiba .....	61
Box 4.1: Performance Contracts in the Public Sector.....	68
Box 4.2: Have Team Incentives Worked in Curitiba? Some Speculation .....	77

## **FIGURES**

Figure 4.1: Outline of the “Expectancy” Framework .....	74
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## EXECUTIVE SUMMARY

### IMPROVING PUBLIC SECTOR PERFORMANCE FOR HIGHER QUALITY PUBLIC SPENDING

The inadequacy of public services in Brazil today encumbers the country's economic growth and social development. The *volume* of government expenditure is not the principal bottleneck: at over 40 percent of GDP, Brazil's total public spending is already much higher than that of comparable middle-income countries. The vital question, therefore, is how to get greater value for public money. As a federal country, improving service delivery in Brazil calls for strengthening the incentives and institutional capacities of sub-national governments. However, it is precisely at the sub-national level where Brazil faces its greatest challenges for institutional development. Therefore, this report examines how particular managerial innovations have been applied in two sub-national jurisdictions in Brazil to deliver improved public services from available resources.

From a broad range of public services, we have chosen to focus on healthcare in this report. The health sector in Brazil absorbs approximately four percent of GDP, and its spending level is likely to rise further given the country's demographic and epidemiological profiles. Thus, improving the efficiency of public health spending can have effects beyond the quality of health services, as uncontrolled spending growth could affect the overall health of the country's public finance and macroeconomic stability in the long run.

Current efforts to improve health service delivery in Brazil should be examined against the background of at least two parallel developments in the 1990s. On the one hand, at the federal level Brazil launched a public management reform agenda in the mid-1990s that subsequently influenced approaches to public sector reform throughout the country. Inspired by that reform discourse, a number of sub-national jurisdictions in Brazil have embarked upon managerial reforms to improve public service delivery. On the other hand, the health sector itself has been going through important policy and institutional transformations since the early 1990s, following the model of decentralized health service delivery.

One of the approaches to service delivery improvement proposed as part of the federal public sector reform agenda in the 1990s involves the use of "Social Organizations" to deliver public services via non-government organizations certified to manage public funds for the purposes specified in management contracts. The 1990s reform efforts also included measures to make personnel management in direct public administration more performance-oriented, through legal reforms to increase managerial flexibility (e.g., managers' ability to fire staff for poor performance) and/or management instruments to enhance public servants' incentives to perform (e.g., performance evaluation and pay).

Since the late 1980s Brazil's health sector has gone through considerable transformation both in terms of structure (e.g., decentralization, the adoption of the Unified Health System (SUS)), and policy content (e.g., greater emphasis on primary care). The health sector in Brazil now benefits from a reasonably coherent sector-wide policy framework (SUS) – certainly superior to other decentralized sectors such as public security or water supply and sanitation. Nonetheless, the effectiveness of the Brazilian federation in providing public healthcare is still limited, as a majority of the sub-national jurisdictions, particularly at the municipal level, suffer from weak institutional capacities their effectiveness and efficiency as healthcare providers.

Within this broader context, the State of Sao Paulo and the City of Curitiba offer two examples of innovative healthcare management reforms: “corporatization” of public hospitals in the State of São Paulo, and performance management in the Municipality of Curitiba. On the surface, these innovations appear to follow the now familiar New Public Management (NPM) prescriptions of “let the managers manage” (managerial flexibility) and “reward performance” (performance-based pay). But the case studies uncover interesting nuances that enrich our understanding of practical, context-specific approaches to performance management within Brazil’s existing institutional constraints. By probing behind the conceptual rhetoric of the reforms, the cases offer insights into “what really matters” in improving public management, particularly with regard to how policy makers can overcome so-called “agency problems.”

The case narratives show how both the State of Sao Paulo and the City of Curitiba have deployed a range of organizational and managerial innovations to diminish policy makers’ informational disadvantage vis-à-vis front-line service providers (doctors, nurses) and achieve greater alignment between the government’s overall policy objectives in the health sector, and the objectives and incentives of the service delivery units and their staff. There is more to management improvement than simply adopting a new organizational model or new managerial slogans. Interestingly, these case studies demonstrate that that within Brazil’s present legal and organizational context it is possible to make demonstrable improvements in public service delivery.

### **SOCIAL ORGANIZATION HOSPITALS IN THE STATE OF SÃO PAULO**

In the late 1990s the government of São Paulo created Social Organizations in Health (Organizações Sociais em Saúde – OSS) by statute to enable a formal partnership between the state and non-profit, private-sector organizations. Under this OSS model, the government provides budgetary transfers to cover the costs of running the hospital, but responsibility for day-to-day administration is delegated to pre-certified non-profit organizations. The State Secretariat of Health (SES) negotiates and signs a performance contract with each of these hospital managers, granting them greater flexibility than their counterparts in traditional state hospitals to run the hospital in the manner they consider best-suited to meet their performance targets. In 2004, 17 public hospitals in São Paulo operated as OSS.

A systematic comparison of 12 OSS hospitals and 10 direct administration hospitals in the State of São Paulo (World Bank 2006a) found OSS hospitals were more efficient and provided better quality services than direct administration hospitals. For example, the OSS hospitals in the World Bank study offered 35 percent more patient admissions for each hospital bed and registered lower overall mortality than direct administration hospitals. What accounts for OSS hospitals’ superior performance?

Part of the answer is the accountability relationship between the SES and the OSS hospital. The management contract specifies the volume of different services to be performed each month (e.g., inpatient and outpatient services, medical consultations) in exchange for a specified budget (a prospective payment block contract). Ninety percent of the annual budget agreed between the SES and hospital administrator is delivered in monthly installments. These disbursements will be reduced by 10 percent if the quantity of services delivered falls to 75-84.9 percent of the agreed targets, and by 30 percent if output falls below 75 percent. The remaining ten percent of the budget is delivered quarterly, contingent upon the hospital submitting properly coded data on their patients and the treatments or services provided.

OSS contracts are fine-tuned through regular dialogue between hospital directors and the OSS supervisory staff of the Secretariat of Health. Adjustments are made from one annual contract to the next, but can also be made by consensus within the operational period of a given contract. Since the hospital's budget depends on meeting the pre-specified performance targets (and submitting well-organized management and performance information to the SES), the hospital managers have a clear incentive to meet the targets. Furthermore, persistent failure to perform could result in non-renewal of the OSS contract.

Once accountability and performance expectations are established, the hospital manager still needs the ability to manage the hospital's resources, including personnel, to achieve the agreed performance goals. Based upon our analysis of 20 hospitals in São Paulo, including focus-group discussions with healthcare personnel in these facilities, there is little or no evidence to assert that the superior performance of OSS hospitals results from higher salaries, performance pay, superior career development opportunities, or even formal supervision mechanisms. Our research did find, however, that OSS hospital managers enjoyed greater freedom in choosing a particular mix of staff/skills and in selecting personnel through less rigid recruitment processes. Rather than being required to follow a rigid process of competitive entry exam (*concurso*), whereby hospitals are only permitted to recruit those who have passed the exam in the order of their test results, OSS hospital managers are allowed to recruit staff through a more flexible process, determined by referrals, recommendations, and/or face-to-face interviews. Moreover, contrary to the norm in direct public administration, OSS managers can swiftly fire employees who fail to perform at expected levels.

These findings suggest that under certain circumstances (where accountability relations are clearly defined and credibly enforced), performance improvements can result from granting front-line managers greater flexibility in managing human resources. Looking to the future, one reform option for Brazil's traditional direct administration would be to modify the rules governing *concursos* to allow hiring managers to interview a short list of pre-qualified candidates instead of forcing them to accept the top qualifiers irrespective of the individuals' likely fit with the organization.

A manager's ability to discipline poor performance is also an important managerial instrument. While a "rapid path" (*via rápida*) procedure was intended to enable public sector organizations to fire poor-performing employees, applicable rules result in continued delays. Reviewing this rule to allow a speedier process of dismissal could lead to more effective human resource management, although obviously the risk of abuse must be assessed carefully.

### **PRIMARY HEALTHCARE IN CURITIBA**

Like OSS hospitals in São Paulo, the performance of healthcare management in Curitiba is generally considered superior to that of an average Brazilian municipality. While rigorous comparative analysis to substantiate such a claim is lacking, the overall public health outcomes in Curitiba offer *prima facie* evidence of the effectiveness of the city's public health system.

Over almost three decades of consistent efforts to build its primary healthcare system, Curitiba has constantly innovated in healthcare and managerial practice, in a context of rapidly growing demand for healthcare (thanks to immigration and the devolution of healthcare to local government). Today Curitiba's health management includes several good practices, such as client orientation (e.g., regular use of telephone surveys to measure service quality and detect problems and streamlining of front-office processes to make a patient visit more pleasant and

convenient), as well as effective use of management information (e.g., development of a sophisticated integrated information system to manage knowledge about patients and their treatments, standardize clinical processes through integrated protocols, coordinate the different parts of the health system, and monitor performance in the different parts of the health system).

Human resources are central to effective performance management in the health sector. Virtually all of the roughly 5,000 staff of the Municipal Health Secretariat (SMS) are tenured public servants with automatic (rather than merit-based) advancement up the seniority scale. Although they enjoy stability as well as other benefits (e.g., relatively generous public sector retirement benefits). Curitiba has tried a number of bonus schemes to motivate these public servants to become performance-oriented. The first of these schemes (PIQ, 1995) was designed to improve performance by making Health Units compete. However, this scheme failed very quickly: teams were able to cheat on poorly measured indicators and rivalry between teams began to undermine the broader unity of staff in the SMS.

A new incentive scheme to improve service quality (IDQ) was introduced in 2000. A quarterly evaluation determines whether individual employees receive a bonus. The result of the evaluation is the weighted outcome of the supervisor's evaluation of the employee, self-evaluation, SMS evaluation of the Unit (based on performance under management contracts), and community evaluation of the Unit. In practice, virtually everybody who does not have a record of excessive lateness or absence gets the bonus. Thus, on its face, the scheme operates only to punish extreme cases of poor performance. Nonetheless, staff believe that the IDQ has had an important impact on performance, although this impact seems to have fallen over time. It may be that, as often happens with workplace innovations, there is a temporary change in behavior until workers readjust to the norm. In this case, however, it also seems that the evaluation process itself (i.e., not the rewards and punishments) has contributed to identifying and solving problems in the Health Units.

The culture of SMS professional staff is dominated by what might, in shorthand, be called a strategic-planning mindset. The Annual Operating Plans (POAs) – mandated by the Unified Health System (SUS) but often not taken seriously by states and municipalities – are used as real management tools in Curitiba. The POAs are accompanied by simple Management Contracts between the SMS and the Districts and between the Districts and the Health Units. Although these contracts are not formally enforced, they set targets for roughly 60 health outputs and outcomes. The targets are set on the basis of discussions between the parties. The computerized information system and the standardized definitions of procedures coming from the integrated protocols have been vital in minimizing the amount of “gaming” that can go on in the measurement of performance.

The way in which Curitiba has combined a variety of managerial instruments (e.g., performance review and bonus, management information system, and standardization of basic care according to protocols) seems to be a key ingredient of its relative success. But the strategic-planning mindset that leads to the effective use of these management instruments likely has deeper roots. The history of Curitiba's administrative development is suggestive. Curitiba is famous the world over for innovative solutions in urban services, especially transport, town planning, and environmentally- and citizen-friendly policies. Most commentary ascribes its successes to the strategic-planning approach born of the systematic urban planning that started in the 1960s in Curitiba. This, in turn, was likely facilitated by the remarkable political continuity that the city has enjoyed over the past two decades.



It would not be easy to replicate Curitiba's experience. Curitiba's system is the product of particular historical circumstances; it is complex; and the relative smallness of the SMS helps it to manage this complexity. With these cautions in mind, it would be useful for would-be replicators to understand how Curitiba has applied strategic planning: more as a *modus operandi* (or work habit) than a formal process. That *modus operandi* has pervaded the organization from the top managers to the operational level. It has involved a mindset that thinks about the future, looks for and solves problems, understands system complexity (and understands that changes in one place may create problems and opportunities elsewhere). It is empirical, experimental, and risk-taking. The formal tools of performance management seem an adjunct to, not a driver of Curitiba's strategic planning.

## **OVERCOMING AGENCY PROBLEMS: CONCLUSIONS AND POLICY IMPLICATIONS**

The two cases of public management innovations examined in this report demonstrate two divergent approaches to performance improvement in Brazil's public sector. São Paulo has introduced organizational innovation through contracting out hospital management to qualified NGOs in the form of "Social Organizations." This model involves devolution of managerial responsibilities from the State Secretariat of Health (SES) to each of the OSS hospitals, circumventing the well-known constraints that define human resource management in the state's direct administration. Curitiba, in contrast, managed to strengthen performance of its primary care system within the existing human resource regime. We suggest (but do not prove) that Curitiba's ability to make effective use of the *estatutário* public servants – who are often vilified as complacent in their permanent job tenure – to provide client-oriented healthcare is largely context-dependent (i.e., the product of Curitiba's positive history of public sector development both in the health sector and more broadly).

In both cases, a central challenge is to motivate staff and align their incentives with the government's broader policy objectives. Our case studies do not provide a straight-forward blueprint for other sub-national governments in Brazil, but we hope they provide a clearer picture of key elements of the reforms that other governments should consider before embarking on reform processes of their own. There are some broadly common strategic tools (which can be applied at different levels of sophistication); and there are choices to be made about the incentive systems that govern staff and management behavior. The case studies explore two types of management tools: i) those that aim to align the expectations of principal and agent and reduce information asymmetry, and ii) those that provide direct incentives to tie an employee's or manager's behavior to performance outputs. The two types are not intrinsically incompatible, but knowing how to combine these instruments is more an art than a science.

**Instruments for aligning expectations and reducing information asymmetry between principal and agent:** There are a number of things that reform-minded governments can do to better align expectations and incentives between principals and agents. Indeed, our two studies suggest a common list of "good things" to do:

- Invest in strategic planning by clarifying expectations and establishing performance feedback mechanisms. These processes work better when operators – the front-line troops – are directly involved.
- Invest in better strategic management of information by standardizing processes and definitions, ensuring data quality, tapping information from the community, and providing IT systems to manage this information.

**Choosing among instruments for direct performance incentives to agents:** The instruments that create clearer, direct incentives for staff and managers are generally difficult to apply because they entail complicated policy tradeoffs (including a higher political profile). Our two cases suggest that extrinsic personnel incentives are more compatible with the use of external labor markets, while intrinsic incentives may be more compatible with internal labor markets (e.g., the RJU, where entry and exit are limited).

- The OSSs in São Paulo rely primarily on extrinsic incentives: the freedom and incentives to manage for managers, and the discipline of external labor markets for staff.
- The SMS in Curitiba places greater emphasis on intrinsic motivations for staff (investing in *esprit de corps*, using staff appraisals to identify and solve problems) and maintains a more hierarchical management format.
- Neither system has so far relied heavily on bonus schemes. (OSS hospitals have not yet tried them, and Curitiba has yet to get far with them.)

This study describes the instruments that have proved important to improve service delivery in São Paulo and Curitiba. It attempts to explain why these instruments are important, and how they work in combination with others. It should be remembered, however, that our two cases are drawn from two of Brazil's most sophisticated governments. States or municipalities that lack the particular history and endowments of São Paulo and Curitiba should invest in understanding what strategic planning is, and what alternative incentive systems may be applicable to their setting. Then, they should proceed, where they can, to improve their public sector performance in an experimental but consistent manner.

## 1. IMPROVING PUBLIC SECTOR PERFORMANCE FOR HIGHER QUALITY PUBLIC SPENDING

There is a growing consensus in Brazil that improving the quality of public spending is key to accelerating the country's economic and social development. Brazil has made important advances over the last decade in reducing income inequality and improving certain social indicators. Yet the chronic deficiency of public services in Brazil is widely recognized as an ongoing impediment to more rapid social and economic gains. The *volume* of government expenditure is not the principal bottleneck to delivering more and better services: at over 40 percent of GDP, Brazil's total public spending is already much higher than comparable middle-income countries. The vital question is how to get greater value for public money.

The quality of public spending has various dimensions, including overall allocations of available public resources across competing priorities and how particular expenditures should be funded.<sup>1</sup> Those questions are dealt with in a separate World Bank study (World Bank 2006b<sup>2</sup>). In this report, we focus on another important dimension of the quality of public expenditures: How is the provision of public services managed to get the most from available resources?

As argued in recent World Bank publications on the topic (World Bank 2004, Fiszbein 2005), improving delivery of public services requires a well-functioning accountability framework that links citizens/clients, policy makers/politicians, and service providers (e.g., doctors, teachers). This means ensuring that layers of relationships work efficiently between those who demand quality services and those who provide them. Citizens, as the ultimate beneficiaries, need to be able to influence the politicians/policy makers who have been elected to represent their interests. Politicians and policy makers, in turn, must be able to control service providers, either the government bureaucracy or other non-government agents entrusted to provide public services on behalf of the government. As we will elaborate below, this means overcoming inherent difficulties in managing layered accountability relationships (principal-agent relations in theoretical terms) that link citizens, politicians/policy makers, and service providers. In this report, we focus on how policy makers can alleviate agency problems – ensuring that service providers (agents) behave in ways consistent with the desires of the policy makers (principals) – through the adoption of certain managerial innovations.

From a broad range of public services, we have chosen to focus on healthcare in this report. The health sector in Brazil absorbs approximately four percent of GDP, and its spending level is likely to rise further given the country's demographic and epidemiological profiles. Improving the efficiency of public health spending thus can have effects beyond the sector, improving the overall health of the country's public finance and long-run macroeconomic stability. This study analyzes two performance-oriented reforms in Brazilian healthcare: the introduction of Social Organization in Health (OSS) hospitals in the State of São Paulo and the management of primary healthcare in Curitiba. The remainder of this chapter sets the scene for the two case studies by sketching the main features of Brazil's national policy framework for health, outlining healthcare management challenges, and describing the recent reforms – many inspired by modern models of performance management – that the federal government has promoted to tackle those problems.

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<sup>1</sup> Designs of funding mechanisms can have effects on how the allocated funds are spent, and thus have an impact on efficiency of the spending. For example, program implementers are less likely to seek efficiency improvements if a given level of funding is guaranteed (e.g., from earmarked revenues).

<sup>2</sup> Public Expenditure Review (forthcoming).

Chapter 2 analyzes the performance of São Paulo's hospitals. It describes how contracting works under the OSS model and, using data from existing studies and from a survey of 20 hospitals carried out for this report, it compares the performance of OSS hospitals and traditional direct administration hospitals. The chapter then analyzes the different employment and remuneration regimes in different hospital types and seeks to explain how these regimes contribute to differences in performance among hospital types.

Chapter 3 places performance management in Curitiba's primary healthcare system in a broader context. First, it characterizes the city's healthcare philosophy (and its historical origins). Next, it looks at management practices in greater detail, distinguishing instruments for client-orientation, knowledge and information management, specialization policies, human-resource management, and performance management. Finally, it seeks to understand how performance management in health was influenced by other innovative management policies in the city.

The concluding chapter seeks to reinterpret the two case studies in the light of agency theory, and to draw possible lessons for reforms elsewhere in Brazilian state and municipal service delivery.

### IMPROVING SERVICE DELIVERY IN BRAZIL

As a federal country, improving service delivery in the Brazilian context largely means strengthening the incentives and institutional capacities of sub-national governments to enhance their performance.<sup>3</sup> It is precisely at the sub-national level, however, that Brazil faces the greatest institutional development challenges. Diagnostic work carried out for the IDB-funded *Programa Nacional de Apoio à Modernização da Gestão e do Planejamento* (PNAGE) revealed a number of common public sector management problems across Brazilian states. These included:

- Inconsistency between structures and responsibilities, weak regulatory structures, and duplication of institutional roles;
- Deficient planning and policy coordination, and absence of performance management (i.e., lack of performance indicators, formalistic and centralized planning and budgeting);
- Weak human resource management, including lack of human resource planning; inadequate number and qualifications of staff; absence of career structures, professional development policies and training.

In trying to strengthen public sector capacity, one of the principal dilemmas for reformers has been how to balance flexibility (for efficiency) and controls (for probity). The current federal legal framework that governs public administration tends to emphasize protection of public interests through restraining politicians' and bureaucrats' discretion in areas such as human resource management, budgeting and government procurement. These laws have not spared Brazil from patronage or corruption scandals, but they have contributed to the historical development of Brazilian bureaucracy that is relatively more professional than most Latin American and middle-income countries.<sup>4</sup>

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<sup>3</sup> In Brazil's federal design, municipalities are mainly responsible for child and primary education, local transport, basic and secondary health, garbage collection and urban planning. States are in charge of secondary education, higher-complexity health services, and public security.

<sup>4</sup> Brazil's public sector began its long path toward professionalization as early as in the 1930s. This professionalization, however, is largely limited to specific areas of public administration (e.g., economic management and certain legal professions), and is rarer at the sub-national levels.

Perhaps more troubling is that Brazil's common legal and organizational designs for public administration have manifestly failed to encourage efficiency or a results orientation in public administration. To ameliorate these problems, a major reform initiative was launched in the mid-1990s with the aim of applying some insights of the New Public Management (NPM), inspired by public management reforms a decade earlier in countries such as Australia, New Zealand and the United Kingdom. NPM seeks to shift the bureaucracy's attention from near-exclusive emphasis on procedural compliance toward achievement of results. It relies on market incentives, whenever applicable, and managerial practices devised by the private sector.

The Brazilian version of NPM, as articulated in the government 1995 white paper *Plano Diretor da Reforma do Aparelho do Estado*, combines a traditional Weberian administrative model<sup>5</sup> with tenured public servants serving in a strengthened state "core" of "exclusive" state functions (e.g., tax collection), and new administrative forms for "non-exclusive" state activities (e.g., healthcare). While the reform applied to the federal government only, the proposal has had wide influence within Brazil, and has since served as a model for a number of experiments with reform at the sub-national levels.

In this model, service delivery in sectors where the goods are contestable in the market (i.e., they could be provided by either the public or private sector) should be contracted out to a non-state entity, such as a Social Organization (see Box 1.1). Brazil's federal and state governments have adopted this model to different degrees in the area of scientific research (*Associação Brasileira de Tecnologia de Luz Síncrotron*; Ministry of Science and Technology), educational broadcasting (*Associação de Comunicação Educativa Roquette Pinto*; State of Maranhão), health (*Instituto de Promoção da Saúde e Desenvolvimento Social da Micro Região de Irecê*; State of Bahia) and culture (*Orquestra Sinfônica do Estado de São Paulo* and *Pinacoteca do Estado de São Paulo*; State of São Paulo).

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<sup>5</sup> A traditional Weberian model of public administration refers to one where tenured public servants, protected from political influence, perform their duties in public interests, mostly through compliance with due processes and legality of public actions rather than with emphasis on results of such actions.

### Box 1.1: Social Organizations

Social Organizations are private-law entities (foundations or associations) that receive public funds to deliver services through management contracts. These organizations are not obligated to follow public sector administrative rules and can be funded with commercial proceeds or donations, in addition to public funds. Their assets belong to the state and are non-transferable. Human resources might be civil servants (*estatutários*) from other state organizations or be hired under the private sector labor regime (*celetistas*). Although Social Organizations are not subjected to public sector rules for procurement, contracts or financial administration, they are subject to external control by the Court of Accounts.

Social Organizations can be created in one of three ways: i) from scratch, ii) conversion of an existing state organization, or iii) qualification/certification of a civil society organization that already delivers services, possibly through agreements with government (*convenios*). To qualify as a Social Organization, the organization has to meet the following criteria: i) be non-profit, ii) set up an administrative council as a decision-making body (with members from the state, civil society, and its own members), and iii) use excess funds exclusively for its activities.

Another salient feature of Brazil's managerial reform in the 1990s are the measures proposed for making personnel management more performance-oriented. The administrative reform approved in 1998 through the 19<sup>th</sup> Constitutional Amendment included provisions to create a new legal category for public sector employment (*emprego público*) whereby public servants would be employed under conditions similar to private sector workers. The reform also envisioned a mechanism to allow public servants to be fired for poor performance, following systematic performance evaluations. These and other measures were intended to increase managerial flexibility and to enhance public servants' incentives for performance. While reform implementation at the federal level has remained incomplete due to political opposition and changing priorities by subsequent governments, these ideas inspired a number of sub-national governments keen to shake up their bureaucracies to improve performance.

The two cases of managerial innovation covered in this report follow these reform developments from the mid-1990s through 2005. It is important to bear in mind, however, that managerial reforms in the health sector also have been conditioned by parallel developments in healthcare policy over this period.

### Healthcare Policy in Brazil

The 1988 Constitution mandated a decentralized, universal and free health service financed from social welfare funds. This led to a series of health policy reforms under the Unified Health System (SUS) that have transformed the organization, financing and provision of health services in Brazil. The federal government's role began to shift from service provider to financier, promoter, and regulator. In the late 1980s Brazil converted its federal public health financing system to a single national health fund. In the mid-1990s, it moved away from supply-driven financing of health expenditures (based on fee-per-service) towards needs-driven funding, instituting a per capita payment for primary care services distributed directly to municipalities. This simple reform caused a vast improvement in the equity of the system. Poor municipalities suddenly had funds for primary health services on a scale they had not seen before. More recently, this capitation system was enhanced by various incentive-based programs, notably the

Family Health Program (PSF), through which the federal government has transferred additional funds to municipalities that agree to implement a particular program.

The most salient shift in healthcare policy was a declared emphasis on primary and preventive care rather than secondary and tertiary health care (specialized clinics and hospitals) and curative medicine. The PSF has been a centerpiece of that primary healthcare model. Under the PSF, first introduced in 1994, municipal healthcare teams proactively provide an integrated package of health services to families in a defined community. These standardized teams work with a uniform set of equipment and procedures. Each team is responsible for providing care to a defined set of 600-1,000 families. By the end of 2005 this model was one of the largest federally-funded health programs, reaching 44 percent of Brazil's population.<sup>6</sup> Only five percent of primary healthcare services are provided by the non-government sector in Brazil.

In comparison to primary care, federal policy towards hospitals remains considerably more "passive." Still, federal spending on curative services far outweighs spending on preventative and public health, even though the share is declining.

### **Managing Performance**

Good performance, in health as in other government sectors, depends on a host of institutional and structural factors, including:

- *human resource management* policies that provide an adequate supply of qualified personnel, and incentives for them to perform;
- a clear *policy framework*;
- appropriate *organizational design*, including clear definition of roles and responsibilities;
- sufficiency and predictability of *funding*;
- adequate *information* on costs and services delivered;
- straightforward, agile *administrative processes* (e.g., procurement); and
- absence of *political interference* in day-to-day administration.

In this report, our objective is to describe what mattered most for performance management in specific reform settings. Recent World Bank reports indicate that managing performance in health, particularly at the municipal level, faces a number of obstacles. Notable among these studies were a public expenditure tracking survey (PETS) in a sample of state and municipal

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<sup>6</sup> See the Ministry of Health website. This study takes the public-ownership framework of primary healthcare under SUS as a given for states and municipalities, and examines how one state (São Paulo) and one municipality (Curitiba) have tackled the issue of performance within that framework. An alternative model of primary healthcare, considered best-practice by many researchers, is one in which private providers qualify to become eligible to provide publicly-funded services, and then compete to register patients. The providers are usually paid a capitation fee, though some services (which might otherwise be under-provided) are provided on a fee-for-service basis. The virtue of this system is that it creates competition and gives patients leverage through the market. While this model is found mostly in advanced countries, it has also been tried in some developing countries, such as Bangladesh, Cambodia, and Guatemala. These arrangements have not been tried in primary healthcare in Brazil, but they have some elements in common with the Social Organization model in São Paulo, which is the subject of Chapter 2. This alternative model of private provision would entail a different set of costs, benefits, and tradeoffs from Brazil's current model. It may be in the interest of sub-national governments in Brazil to consider this alternative model as an option.

health secretariats and facilities (World Bank 2006c), as well as a study of costs and efficiency in hospitals (World Bank 2006a).

*Human resource management.* The health sector relies heavily on its human resources for service delivery. The findings of the Bank's PETS in this regard are alarming. The report identified a range of problems, including:

- Poor work incentives reflected in absenteeism, incomplete work hours, excessive leave, and low salaries for qualified personnel.
- Limited autonomy to manage personnel at the facility level, combined with an inability of the center (i.e., state or municipal health secretariats) to control staff allocation.
- Employees working in one institution but accountable (through their employment tie) to another. This hampers manager's authority over employees, provoking conflicts and dissatisfaction.
- Absence of performance evaluations (among the hospitals surveyed only 27 percent have formal performance evaluation mechanisms).
- An excessive number of low-qualified personnel and an insufficient number of highly-qualified ones, especially in management positions.

*Policy framework.* The PETS found that the capacities of the health secretariats to plan, coordinate, and monitor health service delivery within their jurisdictions vary greatly, but are particularly low at the municipal level. Fragmented planning and budgeting processes comply with formal requirements but are divorced from implementation and do not serve as a basis for prioritization or goal-setting.

The World Bank's costs and efficiency study identified distortions in the system of resource allocation and the payment mechanism under the SUS: most of these transfers are not conditional on performance; they over-fund curative services at the expense of prevention, and over-fund complex procedures at the expense of simpler hospital treatments.

*Organizational design.* The PETS identified a shortage of managerial autonomy and responsibility at the facility level. Many health units lack financial information, and human resource management is overly-centralized. Frequently, centralized systems contributed to low levels of budget execution.

*Funding.* There is a high degree of rigidity in budget execution, according to the PETS. This fact may limit the scope for misuse of funds; however, it also constrains managerial autonomy needed to improve operational efficiency.

*Information.* The PETS found that managerial information is scarce, of poor quality and little used when it is available (either for analyzing costs or controlling them). Information on expenditure was conflicting.

*Administrative processes.* The health sector in Brazil is subjected to the same set of administrative rules as other sectors in procurement, personnel contracting, and other procedures.



These rules are generally designed to limit opportunities for abuse of public resources and positions. The PETS found that an emphasis on prior controls limited managerial flexibility.

*Political interference.* The health sector is no exception when it comes to potential political interference and corruption. The extent to which corruption has penetrated the sector seems to differ by jurisdiction, probably reflecting the overall quality of governance in each locality. An additional factor that sets the health sector apart is the important role of the corporatist body of healthcare professionals – the so-called *sanitaristas* – who have influenced the design of SUS policy. The *sanitaristas* could be both sources of positive externalities (e.g., shared ideological commitment to certain approaches to public health, knowledge sharing and exchange, professional networking to facilitate inter-jurisdictional cooperation) as well as negative ones (e.g., mobilized resistance to changes deemed antagonistic to their corporatist interests).

The picture of sub-national health administration that emerges from these diagnostic results is one wherein the capacities of individual sub-national governments are limited in setting clear policy goals based on robust information concerning the problems and performance of health units (hospitals, *postos de saúde*). These units, in turn, have limited incentives to improve performance, given the rigidity imposed by various administrative rules and the budget framework. Moreover, many jurisdictions are poorly equipped to innovate managerially due to a weak complement of human resources.

It is no surprise that this set of management conditions leads to poor performance in the health sector. According to the World Bank's costs and efficiency study, there is a large variation in efficiency among jurisdictions. Problems are most acute in those hospitals directly managed by governments (i.e., direct administration). Too many hospitals, especially in smaller municipalities, are inefficient because they are below optimal size. The availability of these partially-functioning hospitals at the local level in turn encourages the population to seek care at the hospital level. Many hospitals are overstaffed, underutilized (in terms of beds and surgical facilities), and offer too many of some services and too few of others (World Bank 2005). In both hospitals and primary care, procedural rigidities lead to a shortage of materials, broken equipment, and high loss rates for medicines.

In spite of the manifest deficiencies in health management, there are some significant advantages for healthcare delivery that are not enjoyed by other public service sectors in Brazil. First, the policy and organizational framework is comparatively coherent. SUS may not be flawless, but the fact that the entire sector is structured within a policy framework is a considerable advantage over other sectors (e.g., water and sanitation) whose poor performance is often attributed (at least partially) to the absence of such a policy framework. Second, the informational infrastructure is reasonably solid. A performance orientation relies heavily on the use of information; and notwithstanding the severe problems present in many jurisdictions in collecting and managing data, the health sector is in a more favorable position than most others (e.g., public security) due to the reporting requirements legally mandated in the health sector.<sup>7</sup>

Third, decentralization is likely to have made health spending decisions more responsive to local citizen demands. Municipalities now decide how to spend the money and resources that have been distributed more equitably between levels of government, although it is also possible that municipalities are “too responsive” to local demands, which do not take into account systemic

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<sup>7</sup> This appears to be driven, at least partly, by the decentralization of the health system over the 1990s, and the concomitant information requirements established by the federal government for sub-national governments.

rationality in resource allocations (e.g., building hospitals in each municipality when a regional network and a referral system may be more efficient). Unfortunately, constitutional earmarking of health expenditures may encourage inefficiency as it tends to limit the flexibility of front-line managers to allocate available resources, and makes the resources non-contestable (i.e., the spenders do not have to compete for allocations by showing value-for-money) (World Bank 2006b). However, earmarking does provide greater predictability of public funding.<sup>8</sup>

There is at least one factor that makes service delivery more difficult in healthcare than in many other public services in Brazil: the problem of information asymmetry. Due to the highly-specialized nature of healthcare services, the customers (patients) often are not in a position to determine whether the care they are receiving is of good quality. Because doctors exercise discretion in prescribing a remedy, and because their supervisors are usually not able to observe doctors' work directly, managers are limited in their ability to monitor doctors' behavior and performance. This creates opportunities for doctors and nurses to pursue objectives that may not be fully consistent with the corporate objectives of the hospital or the government. This characteristic of information asymmetry severely complicates the task of performance management.

As this cursory sketch attempts to show, taking into account all the relevant ingredients of good public sector performance is a highly complex exercise. On average, it appears that Brazil is not yet in a position to take full advantage of the potential benefits of healthcare decentralization because of the precarious institutional capacities that characterize a number of sub-national entities, as well as the legal and institutional design of much of SUS that does not encourage performance. This means that for the majority of sub-national jurisdictions, the priority agenda should be to develop the basic institutions of healthcare delivery, including adequate human resources, basic statistics and management information, and minimum administrative capacities (e.g., planning, logistics management). In jurisdictions that have made progress in these areas (such as the State of São Paulo and the City of Curitiba), managerial innovations that are more demanding of incentives and information offer promising paths for improving the performance of the public healthcare apparatus.

## ASSESSING MANAGERIAL INNOVATIONS IN BRAZIL'S HEALTH SECTOR

Policy discussions on the quality of public spending and the performance of public administration would benefit from an explicit consideration of the benefits *and costs* of the existing legal and organizational framework that governs Brazil's public sector, including the legal framework for governing public sector employment and personnel management (*Regime Jurídico Único, RJU*). However, reform advocates should not hold all changes hostage to alterations in the basic architecture of Brazil's public sector. Any attempt to modify that architecture would be politically uncertain, and any changes are unlikely to bring about a rapid transformation, not only because institutional reforms take time but also because the legal interpretation would likely protect those who are under the current regime from any change in their employment conditions (i.e., acquired rights). Thus, while pursuing a systemic reform agenda to make the legal environment of the public administration more amenable to performance-oriented changes, and

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<sup>8</sup> For example, the infrastructure sectors in general suffer from both weak policy frameworks and unpredictable funding arrangements. The education sector benefits from a similar degree of funding predictability, but the sheer number of teachers involved in the system, and their relatively limited professional qualifications, seem to complicate performance management in the sector. Certain economic areas (e.g., revenue administration) and social security administration may be other sectors where policy and funding arrangements are relatively favorable.

while ensuring due process procedures are in place to minimize abuse and patronage, governments should pursue reform opportunities that are present notwithstanding the existing institutional constraints.

Far-reaching administrative reforms proposed since the mid 1990s in Brazil have inspired a number of innovations, but their effects and effectiveness have rarely been evaluated systematically. In this report we present empirical assessments of two recent managerial reforms carried out within Brazil's current institutional setting: "corporatization" of public hospitals in the State of São Paulo and the introduction of performance-based pay in the City of Curitiba. On the surface, these innovations seem to follow the now familiar New Public Management (NPM) prescriptions of "let the managers manage" (managerial flexibility) and "reward performance" (performance-based pay). But there is more to management improvement than simply adopting a new organizational model or a new managerial instrument. The two cases uncover interesting nuances that enrich our understanding of practical, context-specific approaches to performance management within Brazil's existing institutional constraints. They offer insights into "what really matters" in improving management (in this case, of the public health sector), focusing particular attention on how policy makers can overcome so-called agency problems. The case narratives illustrate how both the State of São Paulo and the City of Curitiba deployed a range of organizational and managerial innovations to diminish the policy makers' informational disadvantage vis-à-vis front-line service providers (doctors, nurses) and achieve greater alignment between the government's overall policy objectives and the objectives and the incentives of the service delivery units and healthcare staff.

## CASE SELECTION

São Paulo and Curitiba are not representative of Brazil as a whole. Both are relatively more developed economically and socially than most of the rest of the country. Their human resource bases are larger and more diverse, from which governments can draw relatively better-trained professionals, a critical variable in skill-intensive sectors such as health. A supply of skilled labor is not enough, however, to deliver quality healthcare services. Without good governance, large and diverse human resource bases are insufficient for building a capable public administration. The governments of São Paulo and Curitiba are recognized, as well, for their relatively high institutional capacities and comparatively well-run public administrations (particularly Curitiba). In other words, São Paulo and Curitiba serve as examples of what Brazilian public administration is capable of today under certain circumstances.

As São Paulo and Curitiba are relatively well-run administrations, the main aim of our study is to identify those factors that contribute to their relatively strong performance. In the case of São Paulo, a parallel World Bank study on hospital performance has quantified the superior performance of that state's Social Organization hospitals (World Bank 2006a). After carefully controlling for intervening variables (e.g., size, types of services provided) among hospitals of different organizational types, this study found the Social Organization hospitals to be more efficient and provide better quality care than their direct administration counterparts.

We are on more tenuous ground in asserting superior performance of Curitiba's health system. Curitiba certainly exhibits reasonable health outcome indicators, but available information does not allow us to attribute these positive outcomes to the performance of the city administration. Nonetheless, Curitiba has long been known for its innovative public management, especially in urban planning, and thus we believe our *prima facie* assertion – that Curitiba has a relatively effective public management – is reasonable. The idea of attempting to document the

performance superiority of Curitiba with rigorous empirical analysis was considered at the outset of the research, but discarded given the scope and the final objective of this study as well as costs involved in such a systematic evaluation.

The majority of sub-national governments are not as well-endowed as these two jurisdictions in terms of basic enabling conditions for building a well-performing public sector. As such, lessons to be drawn from our study may not be directly applicable to “typical” sub-national jurisdictions in Brazil. Nonetheless, some of the insights gained from the study appear to offer useful references for other sub-national governments. Therefore, the report offers its policy implications and recommendations with due caution.

## **2. SOCIAL ORGANIZATION HOSPITALS IN THE STATE OF SÃO PAULO**

### **INTRODUCTION**

Beginning in the late 1990s the government of São Paulo adopted a new management model to administer a group of state public hospitals. Social Organizations in Health (Organizações Sociais em Saúde – OSS) were created by statute to enable a formal partnership between the state and non-profit private sector organizations. Under this OSS model, the government provides budgetary transfers to cover the costs of running the hospital, but responsibility for day-to-day administration is delegated to certified non-profit organizations. The State Secretariat of Health (SES) negotiates and signs a performance contract with each of these hospital managers, committing budgetary resources from the public treasury in exchange for specific performance outputs. The managers, in turn, are granted far greater flexibility than their counterparts in traditional state hospitals to run the hospital in the manner they consider best-suited to meet their performance targets.

São Paulo is not alone in attempting organizational reform of this kind. OSS hospitals are illustrative of a national and international trend toward corporatization (or “autonomization”) of government services that expand the so-called “non-state public sector.” There are interesting theoretical arguments in the literature (discussed in Chapter 4) for why corporatization may improve financial and facilities management, and thereby improve hospital performance. Still, human resources are the mainstay of healthcare provision, and clearly the largest expense. Therefore, it is perhaps surprising that the literature on contract-style reforms in developing countries devotes little attention to labor relations within corporatized bodies. One reason for this shortcoming, as noted by Harding and Preker (2003:53), is that most governments reforming their healthcare systems 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.” Thus, even as managers have been granted greater financial autonomy and been made accountable for results, the existing public sector employment rules typically have been left in place.

In São Paulo, however, human resource management rules do indeed differ between OSS and traditional state hospitals. Through the OSS reform São Paulo has attempted to transform the incentives facing healthcare personnel at the point of service delivery, and thereby improve the efficiency and quality of care. Those personnel management differences, and how they affect – if at all – the relationship between hospital managers and their staff, are essential to understand corporatization theory in real-world hospital settings. Thus, the São Paulo experience is a compelling case for analysis. The central question of this study is: How do the incentives facing managers and staff working in São Paulo’s OSS hospitals actually differ from traditional public hospitals, and what is the impact of those differences?

### **CONTRACTING FOR HEALTHCARE IN SÃO PAULO’S OSS MODEL**

In 2004, seventeen public hospitals in São Paulo were administered on a contract basis as Social Organizations in Health, rather than as traditional units within the hierarchical structure of the Secretariat.<sup>9</sup> This administrative reform initially grew out of the federal government’s 1998

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<sup>9</sup> Of the 17 hospitals, 14 operated under Law 846/98 as Social Organizations, while three followed the same rules through a contract between the Secretariat of Health and university Medical Faculties.

constitutional reform, which established a legal framework for autonomous “Social Organizations.” Constitutional Amendment No. 19 enabled private sector, non-profit organizations to utilize public resources (material and financial) to provide public services that are “not-exclusive to the state.”<sup>10</sup> These Social Organizations would enjoy management, budget, and financial autonomy while remaining accountable to government under a performance contract. Those contracts were to specify the period of the contract, the resources provided by government, the expected outputs, the criteria for evaluation of performance, and the rights and obligations of the managers.

In São Paulo the state government subsequently sanctioned its own Social Organization law (No. 846/98) for the state’s health sector, based upon the federal law 9.637/98.<sup>11</sup> The state law specified that, while governed by private sector law, only a non-profit organization could qualify as an OSS, and an OSS-administered hospital could only provide services under the SUS. These hospitals are **not** private. The patrimony remains publicly-owned.

The first step in implementing the OSS model was for non-profit organizations to apply to the state for certification as Social Organizations in Health. If an organization satisfies the criteria for certification, then it is legally authorized by the Governor to enter into a contract with the state Secretariat of Health (SES) to manage one or more public hospitals.<sup>12</sup> (An important qualification criterion is that the non-profit must show a minimum of five years of experience administering health programs or services. São Paulo certainly enjoys an advantage over other states in having a number of reputable non-governmental organizations in the health field.)

The next step is for the SES to negotiate a hospital management contract with the OSS. The management contracts between the SES and OSS specify the volume of different services to be performed each month (e.g., inpatient and outpatient services, medical consultations) in exchange for a specified budget (a prospective payment block contract). As the hospital is required to meet monthly performance goals, 90 percent of the annual budget agreed between the SES and hospital administrator is delivered in monthly installments. Performance within  $\pm 15$  percent of stipulated targets is permissible without affecting disbursements. However, if the quantity of services delivered falls to 75-84.9 percent of the agreed targets, then the financial disbursement is reduced by 10 percent. If output falls below 75 percent, then payment is reduced by 30 percent.

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<sup>10</sup> The underlying rationale for Constitutional Amendment No. 19 (June 5, 1998) was set out in the 1995 “White Paper on the Reform of the State Apparatus” produced by the Ministry of Federal Administration and State Reform (MARE) to specify the objectives and guidelines for redefining Brazil’s public administration. The White Paper asserted that “rigid hierarchical standards ... controlling processes instead of results [produced an administrative system] shown to be stultified and inefficient and, therefore, incapable of coping with the magnitude and complexity of the challenges established by the process of economic globalization” (Brazil 1995:9-10). The proposed solution is for the “State [to abandon] its role as executor and direct renderer of services, while preserving its task of regulator and provider or fosterer of such services” (Brazil 1995:17). Social Organizations are defined by Art. 1 of the corresponding Law 9.637 (1998) as “*peças jurídicas de direito privado, sem fins lucrativos, cujas atividades são dirigidas ao ensino, à pesquisa científica, ao desenvolvimento tecnológico, à proteção e preservação do meio ambiente, à cultura e à saúde.*”

<sup>11</sup> There are a few differences between the federal rules and São Paulo’s Social Organization in Health (OSS) model. One difference is that under federal rules regular government employees transferring to a Social Organization (OS) would receive their former pay and could receive an additional payment from the resources of the OS. In São Paulo, however, a second payment is not permitted.

<sup>12</sup> Complementary Law no. 846 (June 4, 1998) specifies the conditions for an organization to qualify as an OSS. An OSS may manage more than one public hospital, each with a separate performance contract.

The remaining ten percent of the budget is delivered quarterly, contingent upon the hospital submitting properly coded data on their patients and the treatments or services provided. This 10-percent provision reflects some “learning by doing.” The OSS model, as initially drawn up in 1998, allocated 100 percent of funds through 12 monthly installments. However, since 2001, 10 percent of the agreed budget is delivered quarterly, contingent upon reporting output and quality indicators to the SES and to the Evaluation Commission. Notably, the government of São Paulo has demonstrated its willingness to enforce this provision. For example, during its first semester of operation, the OSS Hospital Mario Covas did not produce a proper accounting, and as a result had ten percent of its budget withheld until adequate data were delivered to the Secretariat.

The OSS contracts are fine-tuned through regular dialogue between hospital directors and the OSS supervising staff of the Secretariat of Health. Adjustments are made from one annual contract to the next, but can also be made by consensus within the operational period of a given contract.

The management contracts are supervised by the SES, and subsequently audited by the state’s SUS Council of Health and Court of Accounts (*Tribunal de Contas*). Thus, setting up an OSS reduces the day-to-day managerial authority of government over service delivery, but adds contractual accountability mechanisms based upon performance outputs. OSS governance arrangements are a hybrid of market and hierarchical control. In large part, the OSS model is designed to allow hospital managers to exercise control over the most important factor of production, namely, labor. While there may be multiple factors to explain why the government of São Paulo adopted this management model (see Box 2.1), at the forefront is the desire for improved staff performance.

### **Box 2.1: Why OSS hospitals appeared in São Paulo**

The decision by the government of São Paulo to experiment with OSS hospitals was not motivated solely by a conviction that applying recent theories of effective human resource management would improve service delivery: there was a compelling practical motivation, as well. During the administration of Governor Mario Covas (1995-2001), the state completed construction of a number of new hospitals that were initiated during the 1980s under Governor André Franco Montoro. That presented the government with a dilemma. The federal Camata Law (Complementary Law no. 82/1995) stipulated that a state government's wage bill could not exceed 70 percent of current revenues. As São Paulo already was struggling to come into compliance with the Camata limits, designating these new hospitals as OSSs provided a convenient solution: the new OSS employees would be paid from the public purse – via the budget transfer to the hospital – but their salaries would not count toward the statutory limits, as they are not considered state employees. The numbers clearly are significant. São Paulo's 17 contract hospitals employ over 20,000 employees, more than 20 percent of total employment in the state health sector.<sup>†</sup>

The federal Fiscal Responsibility Law (Complementary Law no. 101, May 4, 2000) largely adopted the public employee expenditure rules of the Camata Law. Under the Fiscal Responsibility Law (LRF) personnel expenditures – including active and retired employees and all forms of monetary compensation, as well as employer pension contributions – cannot exceed 60 percent of Current Liquid Revenue (defined as current income minus constitutional and legal transfers and employer contributions toward the pension system). However, personnel providing services “contracted out” to private sector organizations are considered by the LRF to be “Other Personnel Expenditures” and do not count toward the 60-percent cap.

Any state that reaches 95 percent of the cap is barred from increasing salaries or employment. If the cap is exceeded, voluntary transfers and credit from the federal government is suspended. This created an incentive for employment via cooperatives and Social Organizations.

<sup>†</sup> Note: Overall, the state of São Paulo employs roughly 650,000 people in direct administration and another 150,000 in foundations, autarchies and other autonomous bodies (which includes contract hospitals).

### **PERFORMANCE DIFFERENCES BETWEEN OSS AND DIRECT ADMINISTRATION HOSPITALS**

While the São Paulo OSS model is still in its relative infancy, early data on the efficiency and quality indicate that the OSS model compares favorably to the traditional hierarchical administrative model. A study by the World Bank (2006a, forthcoming) on hospital performance in Brazil examined performance data from 2003 for 12 OSS hospitals and a sample of ten direct administration hospitals in São Paulo of comparable size and complexity. First, the study dispelled the notion that OSS hospitals have benefited from a higher level of financial resources than their traditional public sector counterparts. The 2003 data showed no statistically significant difference in the amount of resources at the disposal of OSS and traditional public hospitals. The study then examined output, efficiency, and quality data for each cohort, and found that OSS performance was either the same or superior in all categories. The key finding is that OSS hospitals have produced more numerous and/or superior services with the same overall quantity of resources.



The OSS hospitals examined by the World Bank study offered 35 percent more patient admissions for each hospital bed. In relation to surgical beds, patient admissions were 61 percent higher. Table 2.1 presents the comparative data from 2003 on hospital bed utilization. Similarly, in the present study the reported occupancy rates for the hospitals in our research sample suggest that OSS and private hospitals outperform traditional public hospitals (Table 2.2).

**Table 2.1: Patient Indicators of Allocative Efficiency in OSS & Direct Administration Hospitals, 2003**

Indicators of allocative efficiency	Avg. among OSS hospitals (N=12)	Avg. among direct administration hospitals (N=10)
Period between patients when hospital bed is vacant (days)	1.2	3.9
Occupancy Rate (%)	80.5	63.2
Avg. Patient Stay in Surgical Clinic (days)	4.2	5.4
Avg. Patient Stay Overall (days)	4.8	5.9

Source: SES/SP, DATASUS, and CNES data, presented in World Bank (2006, forthcoming).

**Table 2.2: Occupancy Rates by Hospital Type (among hospitals in study sample)**

Occupancy Rate	Direct administration (N=7)	Public with foundation (N=2)	OSS (N=7)	Private (N=4)
60 – 70%	1	-	1	1
71 – 80%	4	-	1	1
81 – 90%	2	2	5	2

Source: Results of research questionnaire applied in a sample of 20 São Paulo hospitals. The questionnaire appears in Appendix B.

Quality indicators also show that the OSS hospitals perform as well as or better than their direct administration counterparts. For instance, overall mortality was lower in 2003 in OSS hospitals than in direct administration hospitals. Meanwhile, mortality rates were practically the same in the medical, surgical, and pediatrics sections of OSS and traditional public hospitals (Table 2.3).

**Table 2.3: Mortality Rates in Direct Administration & OSS Hospitals, 2003**

Mortality Rates	Avg. among direct administration hospitals (N=10) (%)	Avg. among OSS hospitals (N=12) (%)
Overall	5.3	3.8
Surgical clinic	3.6	2.61
Medical clinic	11.96	11.64
Pediatric clinic	2.63	2.80

Source: DATASUS/SIH-SUS, presented in World Bank (2006, forthcoming).

The two hospital groups (OSS and traditional) in the World Bank (2006a) study serve populations with similar health problems, as indicated by the patient data. However, in considering these performance indicators it should be noted that many OSS hospitals are “closed door” – meaning

their demand is controlled through a referral process – rather than “open door” hospitals, which attend to spontaneous emergency and urgent care 24 hours a day.

## HUMAN RESOURCE MANAGEMENT IN SÃO PAULO’S HOSPITALS

As a prelude to comparing human resource management in traditional, OSS, and private hospitals, it is first necessary to summarize the disparate forms of employment in Brazil’s healthcare sector.

### Legal Basis of Employment

In 1990 the Single Juridical Regime for public employees (Law no. 8.112) was approved, in compliance with a provision of the 1988 Constitution. Employees hired for a legally-established career post (*cargo*) anywhere in the public sector must be selected through a competitive merit process via written examination (*concurso público*). These statutory employees (*estatutários*) have legal protections against dismissal after two years of service. Each traditional direct administration hospital in São Paulo has its own establishment list (*padrão de lotação*) of authorized posts. (The most recent lists date from 1994.) If there is a vacancy, the hospital manager may hire a new employee for that post from the top of the list of *concursados* (i.e., those who have passed the merit exam) without further authorization from the Secretariat of Health. If there is no vacant post and yet an employee is greatly needed, the hospital may hire a *concursado* on a temporary basis (*pro laborio*).<sup>13</sup>

In 1974 the government of São Paulo approved specific legislation for employment in the state’s hospitals. Law 500/74 was promoted as a means to enable hospitals to be more agile in meeting their specific and immediate personnel needs. Employees hired under Law 500 are selected via an assessment of their resume, not by the more time-consuming *concurso*, which often is not conducted for narrow medical specialties.<sup>14</sup> These “Law 500” employees receive identical salaries and benefits as *estatutários*, except they do not receive a reward for their academic title (*licença prêmio*) or length of service (*sexenio*).<sup>15</sup> In principle, these personnel are hired only for a two-year term, with no promise of job stability. In practice, however, their job stability and protections also became the equivalent of *estatutários*.<sup>16</sup>

Many healthcare professionals, whether in the private or public sector, are hired under private sector labor legislation (*Consolidação das Leis do Trabalho - CLT*). In the public sector, selection under the CLT is via a “selective process” to occupy a *função atividade*. This selective process amounts to checking an employee’s qualifications to ensure that they are suitable for the position, but does not require a competitive procedure for selection. There is no statutory

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<sup>13</sup> The *padrão de lotação* is issued by decree by the governor. As medical technologies and procedures change there are regular conflicts as hospitals request an expanded *padrão* – typically without offering the elimination of any existing positions. If a facility has a vacancy it is entitled to hire someone to fill that post without receiving any additional permission from the governor. NB: The posts of former federal employees who work in hospital facilities that were transferred to the state do appear in the *padrão de lotação*. However, they are not cargos of the state. This means that when these employees retire, the hospital can not fill the post.

<sup>14</sup> Law 500/78 specifies only a “preference” for those who have passed a *concurso*.

<sup>15</sup> The *licença prêmio* is an award of 90 days of leave for every 5 years of employment. The *sexenio* is a monetary award received after 20 years of service that is equivalent to one-sixth of the value of the four *quinquenios* that an employee of 20 years will have earned.

<sup>16</sup> See Complementary Law no. 180/78.

impediment to firing a CLT employee “without cause.” (The employee is simply entitled to a severance payment.) It is rare, however, for CLT employees in the public sector to be fired. In addition, Brazil’s labor courts often confer the same kind of protection to CLT employees (*celetistas*) as they do to *estatutarios*, although the legal basis for doing so is questionable.

In some cases state hospitals have met their personnel needs via cooperatives, wherein the employment relationship is not between the state (or hospital) and an individual, but rather between the state (or hospital) and a union of professional employees. The union (*cooperativa*) assumes the contractual obligation to ensure that a certain number of professional hours are provided to the hospital, as specified under a contract with the facility. These personnel must satisfy certain qualifications, but the actual people who show up to provide the service are completely interchangeable – contractually and in practice. The pay per hour is higher when working through a cooperative than it is for regular CLT or *estatutario* employees. However, cooperative workers receive no benefits, and are paid only for hours worked. Thus, their pay can vary considerably from month to month.

In 1999 there were approximately 23,800 doctors working as *estatutarios* in the state of São Paulo. That number represented approximately 46 percent of all doctors with a formal employment link (public and private sector combined). In addition, there were another 27,800 (54 percent) working as *celetistas* (Cremesp 2002:13). As shown in Table 2.4, the relative importance of different employment types varies significantly among doctors, depending upon their medical specialty. Overall, the public sector accounted for slightly more than 60 percent of all medical jobs in São Paulo in 2000 (Cremesp 2002:7).

While we do not have detailed comparative data for all OSS hospitals, there were no *estatutario* employees at any of the seven OSS hospitals in our sample for this study.<sup>17</sup> In fact, OSS employees are almost exclusively *celetistas* (CLT), which is the form of employment most commonly used in private sector hospitals (Table 2.5). *Cooperativa* personnel can also be found at some OSS hospitals; however, the importance of cooperatives as a form of hospital employment has diminished in recent years, in part as a result of a 2003 change in federal tax law that added to the costs of independent hiring, thereby eliminating the tax advantages that had been available by hiring labor through cooperatives.<sup>18</sup> The experience of the OSS Hospital Mario Covas is illustrative. When the hospital opened in November 2001 the director decided to hire almost all medical staff via cooperatives. As the director explained in our interview, the factors that led to this decision were short-lived. The hospital was just getting underway, and there were many unknowns. Satisfying the hospitals labor needs through cooperatives offered greater flexibility and reduced risks since cooperatives represent only a short-term labor commitment on the part of the hospital. Still, as hospital managers at Mario Covas developed firmer expectations about the future, most cooperative employees were gradually converted to or replaced by CLT employees – thereby establishing a direct employment relationship between the hospital and employee.<sup>19</sup>

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<sup>17</sup> While it is legally permitted for a public employee to transfer to an OS, there is no incentive for employees or OS directors to seek such a transfer.

<sup>18</sup> The trend away from *cooperativa* employment is visible nationally, not only in São Paulo. For example, the Ceará Secretariat of Health found that cooperatives actually turned out to be more expensive for the government, and presented greater management difficulties, than hiring someone as a staff employee. Cooperative employment has been targeted for gradual elimination there.

<sup>19</sup> There are still cooperative employees in the specialties of anesthesiology, heart surgery, and radiology. The cooperative contract with radiologists also makes them responsible for film and other inputs, as well as equipment maintenance.

**Table 2.4: Form of Employment by Medical Specialty in São Paulo's Public Hospitals,**

Medical specialties	Public Hospitals that offer this service N=48		Salaried (Estatutario, Lei 500, CLT)		Fee for service (no employment tie to hospital)		Cooperativas e empresas		Others	
	No.	%	No.	%	No.	%	No.	%	No.	%
Cardiologia	27	56.3	24	88.9	1	3.7	2	7.4	0	0.0
Cirurgia	34	70.8	29	85.3	2	5.9	3	8.8	0	0.0
Clinica Medica	45	93.8	37	82.2	2	4.4	3	6.7	3	6.7
Gastroenterologia	19	39.6	16	84.2	1	5.3	0	0.0	2	10.5
Ginecologia	37	77.1	31	83.8	2	5.4	4	10.8	0	0.0
Hematologia	17	35.4	16	94.1	0	0.0	1	5.9	0	0.0
Nefrologia	13	27.1	13	100.0	0	0.0	0	0.0	0	0.0
Neurologia	22	45.8	20	90.9	0	0.0	1	4.5	1	4.5
Obstericia	29	60.4	24	82.8	1	3.4	4	13.8	0	0.0
Oncologia	12	25.0	12	100.0	0	0.0	0	0.0	0	0.0
Ortopedia	34	70.8	29	85.3	1	2.9	3	8.8	1	2.9
Otorrinolaringologia	24	50.0	21	87.5	1	4.2	1	4.2	1	4.2
Pediatria	41	85.4	34	82.9	3	7.3	3	7.3	1	2.4
Psiquiatria	23	47.9	20	87.0	2	8.7	1	4.3	0	0.0
Urologia	21	43.8	19	90.5	1	4.8	1	4.8	0	0.0
Neurocirurgia	17	35.4	15	88.2	1	5.9	1	5.9	0	0.0
Anestesiologia	33	68.8	26	78.8	3	9.1	4	12.1	0	0.0
Medico de CTI	21	43.8	20	95.2	0	0.0	1	4.8	0	0.0
Plantonista	42	87.5	36	85.7	2	4.8	4	9.5	0	0.0

Source: Cremesp 2002 (data from a sample of 48 public hospitals)

**Table 2.5: Forms of Employment (among hospitals in study sample)**

	Direct administration	Public with foundation	OSS	Private
Statutory (Estatutário)	7	2	-	-
Emergency (Law 500/74)	7	-	-	-
CLT	-	2	7	4
Cooperative	-	-	1	-
For Services Provided (Prestação de Serviços)	-	2	-	4

Source: Results of research questionnaire applied in a sample of 20 São Paulo hospitals. The questionnaire appears in Appendix B.

### Multiple Jobs

Healthcare professionals in Brazil typically do not have just one job at one facility. Most often they hold two or more jobs simultaneously. A 2001 survey by Cremesp/Nescon found that fewer than 20 percent of doctors have a single employment tie (Cremesp 2002:9). Nurses, too, commonly hold more than one job at one facility. While there are no systematic data on multiple job-holding by nurses, the estimates provided by the nurses we interviewed were that at least 60 percent have two employment ties.

In December 1997, Complementary Law no. 840 reduced the work week for a doctor's post in the state public sector from 40 hours to 20 hours – which is the same as federal doctors.<sup>20</sup> Earlier that year São Paulo's doctors mobilized to demand a pay raise, but the state was in a dire fiscal situation. The reduction in hours (without reducing pay) was a means to respond to labor pressure without a direct additional cost to the treasury. Doctors were then able to combine two jobs (and two salaries) at different public hospitals for a total of 40 hours per week.

For doctors and dental surgeons who already have an employment link with the state, it is possible to work extra shifts in addition to their regular hours, either at the hospital where they normally work, or at another facility. These 12-hour shifts are known as *plantões*.<sup>21</sup> Most doctors work more than 40-hours per week through a combination of posts at public and private hospitals, *plantões*, private practice, and hours assisting on surgical teams on a fee-for-service basis. The 40-hour limit is for public posts only.

The standard employment contract for nurses is 30 hours per week. A maximum of 40 hours are allowed at any single facility, but some nurses combine 36-hour positions at two different hospitals.<sup>22</sup> Among nurse assistants, holding two jobs is believed to be even more common than it is for nurses. Nurse assistants can have 30, 36, or 40 hour work schedules. Many combine 30 hour schedules at two facilities.

## **COMPARING HUMAN RESOURCE MANAGEMENT IN OSS AND TRADITIONAL PUBLIC HOSPITALS**

A common perception of senior staff in the Secretariat of Health – which was supported by many of the healthcare professionals we interviewed – is that efficiency and productivity are generally superior in the OSS hospitals than in their traditional hospital counterparts. That perception is substantiated by a separate World Bank analysis of 2003 hospital performance data (2006a, forthcoming). Likewise, the data on occupancy rates and employees per hospital bed for the hospitals in our present research sample support the same conclusion: OSS performance is generally superior (Table 2.2 and Table 2.7). Most of the doctors we interviewed at OSS hospitals also maintained a job at a direct administration facility. Thus, it seems evident that traditional public hospitals are able to attract many doctors of the same caliber as those working for OSSs. Are there important differences in human resource management for healthcare professionals in OSS and traditional state hospitals that might explain the performance differences?

### **Establishment Control and Staff Composition**

While not directly related to performance in terms of efficiency and quality of care provided, financial discipline often goes with careful use of resources, and thus cost-effectiveness and efficiency of services delivered. This indirect incentive effect of financial control depends on

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<sup>20</sup> X-ray technicians and laboratory workers also have a 20 hour work week (LC 848).

<sup>21</sup> There is a legal limit of 12 *plantões* per month. The idea of creating *plantões* for nurses, as well, has been under discussion but is not permitted at the present time.

<sup>22</sup> This is the case for “Flavia,” a neonatal intensive care nurse at Hospital Mario Covas who participated in our focus group discussion. She works 36 hours per week for the OS and another 36 hours per week at a private hospital. A survey by the *Conselho da Enfermagem* found that average monthly (combined) income for nurses in São Paulo was R\$ 3,500 to R\$4,000.

who bears the responsibility of controlling cost drivers (of which human resources are the most important).

Brazil's Fiscal Responsibility Law sets an upper limit for government personnel expenditures (60 percent of the net current revenues for state and municipal governments). Consistent with that law, each OSS contract includes a provision mandating that the hospital wage bill may not exceed 70 percent of the hospital's overall budget. At the time of the first OSS contracts, personnel expenditures in traditional public hospitals ranged from roughly 60 percent to 68 percent, so the 70 percent cap is not meant to be onerous.<sup>23</sup> So long as OSS directors do not exceed that 70 percent limit they are free to decide how many staff, with what skills, are appropriate to fulfill the hospital's mission.

In traditional public hospitals the number of employees, by type, is given by the hospital's establishment list. The director has no responsibility or control over this allotment of personnel, as the authorization to hire additional staff at a traditional public hospital (and foundation hospital) is made by the state Secretariat of Health. In contrast, at each OSS, like the private hospitals in our sample, the hospital's General Directorate will make the decision whether or not to hire additional personnel. Likewise, directors of OSS, private, and foundation hospitals all indicated that they have authority to determine where to make budget cuts in the event of a shortfall.

As Table 2.6 indicates, OSS hospital directors in the exercise of their establishment authority have hired professional staff in markedly different proportions to what is found in the establishment lists (*padrão de lotação*) of traditional direct administration hospitals. The data indicate that OSS hospitals rely to a greater extent on fully-qualified nurses, and less on doctors. That is precisely the kind of staffing mix that many healthcare analysts advocate to provide quality care at lower cost.<sup>24</sup> In addition, the number of employees per hospital bed at traditional direct administration hospitals was considerably higher, on average, than at OSS and private hospitals in our study sample (Table 2.7).

**Table 2.6: Staff Composition in Direct Administration & OSS Hospitals, 2003**

Personnel hours contracted (40 hour equivalents)	Avg. among direct administration hospitals (N=10)	Avg. among OSS hospitals (N=12)	Difference (OSS/direct administration)
Doctors	203.15	143.80	(71%)
Nurses	40.50	54.09	33%
Nurse Assistants	256.81	234.12	(92%)

Source: SES/SP, DATASUS, and CNES data, presented in World Bank (2006, forthcoming).

<sup>23</sup> A World Bank (2006, forthcoming) analysis found that average personnel costs represented 68% of total expenditures among the 12 OSS hospitals examined in the study.

<sup>24</sup> See, for example, Edwards, Wyatt and McKee (2004). I am grateful to April Harding for suggesting this source.

**Table 2.7: Number of Employees per Hospital Bed (among hospitals in study sample)**

Employees per Bed	Traditional Public	Public with Foundation	OSS	Private
2 – 3.9	2	-	-	1
4 – 4.5	-	-	5	2
4.6 – 5	-	-	2	-
5.1 – 7	3	2	-	1
7+	2	-	-	-

Source: Results of research questionnaire applied in a sample of 20 São Paulo hospitals. The questionnaire appears in Appendix B.

### Personnel Selection

Personnel in traditional public hospitals are selected via written examination (*concurso público*). In contrast, the directors of OSS and private hospitals included in our sample stated that personnel selection at their hospitals is based upon an analysis of curriculums, interviews, and (sometimes) practical exams. These directors unanimously affirmed that they have autonomy to hire a professional whom they consider qualified, without further interference. In contrast, the directors at traditional public hospitals (and foundation hospitals) confirmed that they lack that authority.

As the procedures for selection and appointment differ between OSS and traditional public hospitals, so does the time required from the moment a decision is made to hire someone for a position to the day that new employee arrives for work. Whereas the elapsed time for *all* the OSS, private, and foundation hospitals in our study was less than a month, at the traditional public hospitals that elapsed time ranged from one month to more than six months (Table 2.8).

**Table 2.8: Average Elapsed Time between Initiating a Hiring Process & Employee Arriving to Work (among hospitals in study sample)**

Elapsed Time	Direct administration	Public with Foundation	OSS	Private
1 month	3	2	7	4
2 months	1	-	-	-
6 months	1	-	-	-
> 6 months	2	-	-	-

Source: Results of research questionnaire applied in a sample of 20 São Paulo hospitals. The questionnaire appears in Appendix B.

### Salary Determination

In traditional direct administration hospitals salaries are paid and accounted for centrally, and salary scales are also determined centrally for all categories. The director's budgetary authority, as confirmed by our study visits, is limited to medicines and other recurrent costs.

Meanwhile, the vast majority of OSS employees are hired under the private sector CLT law. In fact, while there are a few OSS managers who hire some labor through cooperatives, at most OSS hospitals *all* employees are *celetistas*. (The decision is up to the OSS director.) These hospital

directors can set/negotiate the pay levels for their CLT and *cooperativa* staff. The realities of the labor market, not statutes, are the binding constraint.

Focus group interviews with doctors and nurses at the hospitals in our sample revealed that, in certain instances, pay for a given post was somewhat higher at an OSS. Generally, however, the healthcare professionals we interviewed reported that their pay on a per hour basis was closely comparable at direct administration and OSS hospitals.<sup>25</sup> Unfortunately, comparing hourly wages between traditional public and OSS hospitals is complicated by an oft-mentioned practice at direct administration hospitals whereby individual doctors and nurses reach an informal agreement with hospital administrators to receive their full pay while working less than the full number of prescribed hours. The purported rationale for this “understanding” between health professionals and their managers is the modest pay scale that applies in the traditional state system. Clearly, the practice is not uncommon, but is impossible to quantify.<sup>26</sup>

A list of the non-salary benefits offered to employees at direct administration, OSS, and private hospitals was gathered through the study questionnaire. Benefits are somewhat better at OSS than direct administration facilities, and better still at private hospitals (Table 2.9). Private hospitals are also the arena where doctors can earn much higher pay than at OSS or direct administration hospitals. However, focus group participants consistently explained this was only true for doctors with well-established reputations working at prestigious private hospitals.

**Table 2.9: Comparing Employment Benefits (among hospitals in study sample)**

Benefit	Traditional Public	OSS	Private	Public w/ Foundation
Food subsidy	√	√	-	-
Transportation subsidy	√	√	-	-
<i>Cesta básica</i>	-	√	-	-
Education subsidy	-	√	-	-
Private health plan	-	-	√	√
Private dental plan	-	-	√	√
Life insurance	-	-	√	√
Private retirement plan	-	-	√	√

Source: Results of research questionnaire applied in a sample of 20 São Paulo hospitals. The questionnaire appears in Appendix B.

<sup>25</sup> “Marcos,” a surgeon who joined one of our focus groups, works 24 hours per week as a *celetista* employee with an OSS, another 24 hours (in 2 *plantões*) as a statutory employee with a municipal hospital in São Paulo, and an additional 20 hours per week in a private clinic. Interestingly, it is the municipal hospital that pays far better than the other two. NB: There is a 40 hour per week limit for a surgeon in public hospitals. Although this should apply to Marcos’s situation, there is no authority that keeps track of hours worked in public hospitals operated by different levels of government.



## **Performance Pay**

It is perhaps interesting to note that traditional public hospitals – and not the OSS hospitals – have a version of performance pay based upon a quarterly evaluation. Unfortunately, the poor design of the Special Incentive Reward (PI) undermines its potential use as a performance incentive mechanism (Box 2.2). In all but the most extreme cases the evaluation is a *pro forma* exercise. Indeed, a doctor at one of the public hospitals mentioned that some of his superiors who have filled out his evaluation did not even know him, let alone his work. Likewise, nurses that work with him are evaluated by the head nurse (which seems appropriate), but without consulting him for his opinions (which seems regrettable). None of the OSSs visited for this study had a pay for performance plan, though the directors have the authority to establish such a plan if they choose.

It is important to acknowledge that for most jobs it is notoriously difficult to implement an effective pay for performance system – whether in Brazil or anywhere else. In fact, pay is not closely related to performance in many organizations that claim to have merit increase systems (Baker et. al. 1988). A strong pay-for-performance scheme “motivates people to do exactly what they are told to do” (Baker et. al. 1988). However, it is often difficult to specify precisely what someone should do, which can lead to perverse outcomes. Moreover, merit-pay systems may encourage employees to expend unproductive effort in “gaming” the system to measure and evaluate output. The cost of dealing with the problems engendered by merit pay systems may simply outweigh the benefits they offer.

## **Career Development**

A common theme of our interviews with surgeons is that the large public hospitals treat patients with more varied and uncommon medical pathologies than those at OSS and private sector hospitals. This feature can make the public hospitals a more intellectually and professionally stimulating place to work for many doctors.

“Ana” is one of the doctors interviewed for this study. She works 24 hours per week as a general surgeon at an OSS, another 30 hours per week, on average, at a traditional public hospital, and 12 more hours per week at a private hospital. On occasion, Ana also joins a surgery team for operations performed at other hospitals. She earns considerably less per hour for her work at the traditional public hospital, largely because one third of her time there is donated for free. Why does she work there if her hours could be fully remunerated by working elsewhere?

Ana told us that the public hospital is where she did her residency, so she feels a certain emotional commitment to the hospital. But more importantly, her work there allows her to continue to develop her skills in her specialty of plastic surgery. In contrast, her work at the OSS and private hospital is in general surgery, and does not allow her to utilize and develop those specific skills.

There are instances, certainly, when OSS directors can offer employees attractive professional development opportunities. “Marta” is an infectious disease specialist, hired as Chief of Section for infectious disease control at the OSS where she works. She also works in the same specialty at Hospital das Clínicas (a large public teaching hospital), but with far less responsibility. Consequently, Ana earns more than three times the amount per hour for her work as Chief of Section at the OSS (R\$43.90/hour) than at Hospital das Clínicas (R\$13.40/hour). Still, Ana explained she does not wish to give up her employment tie with Hospital das Clínicas because

patients with rare diseases are treated there, and not at the OSS hospital. That exposure boosts her professional qualifications and experience.

### Box 2.2: The special incentive award

In 1998, a special incentive award (*Prêmio de Incentivo Especial – PI*) was created for doctors, sanitary workers (*medico sanitaria*) and dental surgeons employed at traditional public hospitals in São Paulo. (See Resolução Conjunta SS/SAM no. 3, May 17, 1998.) Nurses, auxiliary nurses, and other professionals directly involved in healthcare delivery are now also eligible for this PI. However, there are problems both in the design and implementation of this award.

For doctors, calculating the value of the reward is complex. Each month the human resources staff in each public hospital must tally the number of consultations, treatments, and/or surgeries performed by each doctor. Depending upon the specialty and service performed, the award is valued between R\$2.00 and \$2.67 per service, with a cap on the total number of eligible consultations/treatments that ranges from 158 to 352, depending upon the employee's work day (12 hours vs. 20 hours) and specialty (e.g., psychiatry, doctor, sanitary worker). (See Resolução SS-111, Secretaria de Estado da Saúde, June 19, 1998.) Multiplying the number of consultations/treatments by their unit value yields the maximum amount per month that the doctor can potentially receive for "incentive pay" that month.<sup>†</sup> The actual amount of the PI award can be less.

Eligible employees (including doctors, nurses, etc.) are entitled to 50 percent of their total potential incentive pay simply due to the fact that they are employees of the Secretariat of Health. Another 30 percent depends upon the institutional evaluation, while the remaining 20 percent is contingent upon receiving a satisfactory individual evaluation.<sup>‡</sup>

There is a maximum of 20 possible points on the individual evaluation form. With 11 points or higher, an employee is entitled to 100 percent of the one-fifth of the PI that is determined by the individual evaluation. With a score of 10 points the employee is awarded 50 percent; and anything less, 0 percent. On the evaluation form, an employee receives 5 points simply by showing up to work on time. Thus, it is quite easy to accumulate at least 11 points. Indeed, in the records of Hospital Brigadeiro, for the month of July 2004, 96% of those evaluated received a score of 11 or higher, while the remaining four percent received a score of ten points. Not one of the 982 people evaluated received a score below ten. The Director of Hospital Brigadeiro acknowledged that PI is primarily a reward for reasonable attendance, not efficiency or effort. Thus, the PI largely fails to serve its purported role: namely, encouraging greater effort on the part of health care employees. In practice, it is largely an input to base pay and not a "reward" for performance.

<sup>†</sup> Note: The PI for anesthesiologists and surgeons is calculated a bit differently. They receive a certain number of points depending upon the length of time of a particular surgery. They are then awarded \$R20.00 for each point, up to a maximum of 50 points. (See the *Memorando Circular* STRH, April 28, 2000.) It is perhaps a design flaw that doctors are punished financially for attending a medical conference, because that is not compensated under the PI formula.

<sup>‡</sup> Note: If on approved leave or vacation, doctors, sanitary workers, and dental surgeons are entitled to receive the same PI award earned during their last full month of work.

It is possible that OSS directors can offer more internal promotion opportunities based upon merit than traditional state hospitals. Further study is needed, however, to determine the extent of this

difference. On the whole, professional development opportunities for doctors and nurses often appear to be greater in traditional state hospitals than at OSS facilities, largely due to the greater variety and complexity of illnesses handled by the traditional public hospitals.

### Performance Evaluation and Supervision

OSS and private hospitals often appear to have better information than their traditional public sector counterparts regarding hospital efficiency and personnel. For example, only three of the seven traditional public hospitals in our sample were able to provide data on their rate of absenteeism; and their rates tend to be inferior when compared to the private and OSS hospitals (Table 2.10). Similarly, none of these seven hospitals could provide data on employee turnover (Table 2.11).

**Table 2.10: Rates of Absenteeism**

Absenteeism (Percent)	Direct administration (N=7)	Public with Foundation (N=2)	OSS (N=7)	Private (N=4)
0 – 1	2	-	4	-
1.1 – 2	-	-	3	2
2.1 – 3	-	2	-	2
3.1 – 4	-	-	-	-
4.1 +	1	-	-	-
Data unavailable	4	-	-	-

Source: Results of research questionnaire applied in a sample of 20 São Paulo hospitals. The questionnaire appears in Appendix B.

**Table 2.11: Employee Turnover Rates (among hospitals in study sample)**

Turnover (Percent)	Direct administration (N=7)	Public with Foundation (N=2)	OSS (N=7)	Private (N=4)
0 – 1	-	1	1	1
1.1 – 2	-	1	3	-
2.1 – 3	-	-	2	-
3.1 – 4	-	-	1	-
4.1 +	-	-	-	3
Data unavailable/ No response	7	-	-	-

Source: Results of research questionnaire applied in a sample of 20 São Paulo hospitals. The questionnaire appears in Appendix B.

There is little doubt that supervision can be very poor at traditional public hospitals. However, it is possible to identify traditional public hospitals where supervision appears to be excellent. The Hospital Vila Penteadó maintains monthly data for all medical personnel with the type of activity performed (e.g., consultation, surgical procedure, UTI, neo-natal, & ultrasound), and the quantities for each service. These data are used for calculating the Special Incentive Reward (discussed below), but they are also used by the senior managers at the hospital to track the “productivity” of all the medical specialists, and to identify areas or individuals where some intervention or discussion is warranted.

Certain public hospitals, as well as OSSs, also have begun to gather systematic information from their patients on the quality of their service. The *Conte Comigo* (“Count on Me”) program began in seven direct administration hospitals in September 2003. The stated aims of the program are to offer support to patients and visitors to the hospital, to help them get where they need to be, and to transmit criticisms and suggestions to medical personnel and managers. The *Conte Comigo* teams prepare a monthly report for the directors of each division within the hospital, based upon the number of surveys they gather each month (300 to 400 in the case of Hospital Brigadeiro). These teams also collect specific criticisms concerning a particular doctor or staff member. Those are forwarded to the attention of the division directors for a reply. Then, the *Conte Comigo* staff communicates that response back to the patient.

The seven OSSs we visited all maintained a wealth of information on the number of services performed, by hospital units and by individuals. Yet, it was not clear from our focus group interviews that doctors believe *formal* supervision procedures are more prevalent or rigorous at an OSS than at other public facilities. Performance contracts between the SES and the OSS specify specific outputs. However, at none of the OSS hospitals in our sample did the director then allocate a portion of those outputs to individual staff members as a performance measure.

### Disciplinary Actions

In all of the hospitals in our sample, the typical formal means of punishment for poor performance were a written notice, suspension, and finally removal. In the public hospitals it was also possible (at least in principle) to deny an employee their monthly performance award, as discussed in Box 2.2. Informal incentive mechanisms, including those related to discipline, are discussed below. Table 2.12 summarizes formal human resource management authorities by hospital type.

**Table 2.12: Managerial discretion over human resource decisions, by hospital type**

	Direct administration	OSS	Private
Define personnel needs within budget constraints (establishment control & staff composition)	No	Yes	Yes
Discretion to hire or fire according to the needs of the hospital	No	Yes	Yes
In hiring, selection of best-qualified candidate as judged by hospital director	No	Yes	Yes
Determine compensation levels (pay and benefits)	No	Yes	Yes
Link monetary incentives to performance	No <sup>†</sup>	Yes <sup>†</sup>	Yes

<sup>†</sup> Note: Although managers do not have the authority to set performance incentives, there is a performance award (discussed in Box 2.2) for employees of traditional public hospitals in São Paulo. Meanwhile, although OSS managers acknowledge that they have the authority to enact a monetary performance award system for their employees, none of the managers in our sample of seven OSSs made any such awards.

### THE POWER OF INFORMAL INCENTIVES (THROUGH FORMAL AND INFORMAL RULES)

Comparing key features of OSS and traditional public hospitals *as employers*, and then examining the employment choices of a sample of healthcare professionals reveals the complexity of

personal utility functions. Labor economists often adopt a narrow view of human preferences, with a parsimonious utility-maximizing assumption whereby workers make individual calculations to trade off money vs. leisure. Clearly, the employment choices made by the healthcare professionals in our São Paulo focus groups reflect utility functions that are far more complex than the parsimonious model suggests.

Our hospital interviews confirmed the common perception that multiple-job-holding by healthcare professionals is, in large part, a strategy to minimize risk. (The “frame” within which these professionals make their employment decisions is marked by the memory of unpredictable changes in pay and employment in both the public and private sectors.) Nevertheless, it is clear from these interviews that risk-aversion is inadequate to explain their employment choices, particularly when professionals have not just two, but three and four employment ties. Generally we were told that posts in traditional public hospitals were better for (i) security; (ii) professional development; and (iii) flexibility with hours/schedule. A job at an OSS, meanwhile, was considered superior for (i) its “organization” (professionalism) as a place to work, and (ii) the opportunity to be affiliated with a prestigious institution. (The same was true of the foundation hospitals.) As for private hospitals, these could offer a sense of prestige, and the potential for better pay. Thus, a mix of employment ties can satisfy a range of diverse objectives. Reducing risk is merely one of them.

Based upon our analysis of 20 hospitals in São Paulo, including focus-group discussions with healthcare personnel in these facilities, there is little or no evidence to claim the superior performance of OSS hospitals results from higher salaries, performance pay, superior career development opportunities, or even formal supervision mechanisms. If the “managerial autonomy” enjoyed by the managers of OSS hospitals is important to explain differences in performance, then where do we see it? The key answer appears to be staff composition, the processes of staff selection, and the possibility to dismiss employees.<sup>27</sup>

When the OSS Hospital Carapicuíba (Santorinhos) prepared to open in October 1998, the director decided to hire all his staff as *celetistas*. Not a single *concurso* was held. The director and his senior managers looked to the School of Medicine for potential employees, asking for recommendations and advertising through informal networks. They asked promising candidates to come in for interviews, and hired whoever seemed to be the best fit for the organization. Department heads made their selections, which then had to be approved by the hospital director. All doctors at Hospital Carapicuíba were hired in this semi-informal manner.

For nurses, the director chose a more formal process for interviewing and evaluating potential candidates; but again, none of the nurses were selected from a list of *concusados*. Five employees were hired through formal, public advertisement of the positions, but managers and the director were disappointed with the quality of the resulting hires. That experience strengthened their belief that word-of-mouth recommendations were the best way to identify the best staff for the organization. The OSS Hospital Mario Covas selects staff in the same way. In

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<sup>27</sup> An alternative explanation, which relies neither on formal nor informal human resource management rules, is a variant of the so-called “Hawthorne effect,” whereby worker behavior may differ (and in this case improve) not because of the content of the reform or “experiment” employed, but simply because the workers know they are being studied (or are subject to increased attention, as in the case of a high-profile reform). In this case, however, one would expect the positive “Hawthorne effect” to be temporary, as the initial excitement or attention created by first establishing a Social Organization gradually wears away. Social Organizations have now been operating in São Paulo for more than five years, in some cases.

these settings managers are empowered to search for personnel that are both highly qualified and a good fit for the organization.

State hospital managers cannot select staff they believe are best suited for their facility. If they have a vacancy they must hire the person highest on the list of *concurados* for that position. There is no opportunity to interview even a small number of pre-qualified candidates to determine who would be the best fit for the organization. There is no flexibility or discretion.

The overall number of staff is another aspect where the director of a traditional public hospital has no authority. At Vila Penteadó the number of doctors (341) is the same today as when the hospital opened in 1991. By all accounts Vila Penteadó is one of the best performing direct administration hospitals in São Paulo. It is unique in that this hospital has had only one director since it opened; but the director still must overcome specific challenges or obstacles to put together a dedicated staff. The establishment lists have not been changed, so turnover is the only way that hospital managers can change the staffing profile. For example, if the hospital wants to add a burn unit, the director can not simply advertise for the correct medical specialists and hire those that are needed. He can only build this new capacity gradually as those with other specialties retire or for other reasons leave the hospital.

Turnover rates were high at Hospital Vila Penteadó during its first years of operation. Firing a statutory employee is exceedingly difficult. Still, the director (and other senior managers) could make it unpleasant for employees who did not perform well by regularly providing feedback and criticism, making certain that shirking would not be tolerated. Eventually personnel who were not committed to the goals and culture of the hospital sought transfers to other facilities (which helped the performance of Vila Penteadó, but simply transferred the problem elsewhere). Turnover rates are now lower than in the first years as the hospital has developed a certain reputation, which tends to screen out some unsuitable candidates. However, the problem has not gone away. The director is generally pleased with new staff named to fill vacancies in pediatrics and intensive medicine; but he is regularly disappointed with almost a third of the staff in the clinical area. There is no trial period, and no simple way to discipline or fire a poor performer.

One option for disciplining a bad doctor in a traditional public hospital is to make a formal complaint to the Regional Medical Council (CRM), a professional body that doctors must join in order to practice medicine in the public or private sector. However, this option has two important limitations. First, the CRM investigates and judges potential malpractice or ethical infractions, not complaints that a doctor is merely inefficient or unproductive. Second, the process can be extremely slow: 4-5 years from the time of the initial complaint until final resolution. The CRM will first carry out a preliminary evaluation to decide whether a disciplinary case is warranted. Then, if the CRM determines that it is justified, a disciplinary procedure is launched. Various parties can be called to testify. Penalties range from (i) confidential warning, (ii) confidential censure, (iii) public censure, (iv) suspension (usually 30 days), and (v) dismissal (disaccreditation).

Many managers will conclude that denouncing an unprofessional doctor to the CRM is simply not worth the trouble. As the president of CRM explained, “when you denounce someone you cannot be sure of the outcome; but you likely will continue to work in the same hospital with that person until the disciplinary proceeding is finally concluded.” Even if the person is eventually dismissed, the manager cannot be certain that the one named to fill that vacancy will be any better.

In Brazil, as in other countries, managers often are reluctant to fire, penalize or give poor performance evaluations. After all, the manager is not the residual claimant for any budget surplus (see Chapter 4), so there is not a strong incentive for a manager/director to suffer the costs – in terms of time, personal conflict, etc. – associated with penalizing or firing an employee in the interest of greater efficiency. Clearly, however, the costs for disciplining an employee at an OSS are much lower than in traditional direct administration hospitals. Two doctors were fired from the OSS Hospital Mario Covas in 2003, and another was fired in 2004. A fourth doctor was “dismissed” from Hospital Mario Covas at the end of his probation period. (Under the CLT legislation, managers also have the benefit of a three-month probationary period to see if a new employee is a good fit for the organization.) Each of those actions could be taken relatively quickly. Meanwhile, the director of Hospital Vila Penteadó began a disciplinary process in the year 2001 to fire a doctor for malpractice. Eventually, as the process was nearing conclusion in 2004, the doctor resigned to evade an official sanction.

The performance advantage, on average, of OSS hospitals appears to result largely from the ability of OSS managers to use information networks and informal incentives in personnel selection. Can this informality be abused? Certainly. On the other hand, it enables senior managers to assemble a group of employees with a common commitment to an organizational mission and culture. That collective spirit is difficult to quantify but terribly important. It helps to align the goals of principal and agent, thereby reducing monitoring costs and generating levels of performance that can only be induced, not forced. It is impossible for any manager to observe his subordinates constantly. The best hospitals are those where employees want to do good work and where they believe that their colleagues have the same commitment. Where this is true, then employees are likely to give their best (“cooperate” to achieve a common goal) in the belief that their colleagues will do the same. If, on the other hand, an employee believes that his colleagues will evade their work whenever possible (“defect”), the probability that the employee also will shirk increases substantially (Miller 1992).<sup>28</sup>

A professional, committed organizational culture created and sustained by skilled managers is a setting that supports the reciprocal cooperation that underlies highly effective and efficient organizations. If the organizational culture is one in which cooperation is expected, then there are informal but powerful means to punish a “defector.” The Hospital Vila Penteadó offered an interesting illustration. Nurses often arrange among themselves to swap shifts (e.g., because one of the nurses wants a three-day weekend for a trip out of town). However, nurse supervisors must approve those requests. Generally, they do. However, as a form of punishment (and to induce cooperation) supervisors do not approve schedule changes for nurses who have showed up to work late or in other ways been “defectors.” The supervisors are clear with subordinates about their reasons for approving or denying such requests. The message is “I’ll cooperate with you if you cooperate with me (and the rest of the hospital staff) in delivering high-quality, efficient health services at this hospital.”

The Vila Penteadó example demonstrates that an environment of collective cooperation toward a common goal can be induced and nurtured at direct administration hospitals, not only at OSS and private hospitals. It is important to recognize, however, that a well-meaning OSS manager has important tools at his disposal that his counterpart at a direct administration hospital lacks. And that can make all the difference.

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<sup>28</sup> “The principal knows, in general terms, what he wants the agent to do, but the range of possible actions that the agent can take, and the range of possible outcomes, is enormous.” (Baker et. al. 1988:598).

## CONCLUSIONS & RECOMMENDATIONS

The descriptive data gathered from our field research at 20 São Paulo hospitals is consistent with the data analysis of the World Bank study on hospital performance (2006, forthcoming): OSS hospitals as a group have outperformed their direct administration counterparts. The public perception of the OSS reform is also positive, so much so that the government is exploring the possibility of extending the model to additional state hospitals. Nevertheless, it is easy to overstate the magnitude of the difference between these hospital types, and to oversimplify the explanation for the superior OSS performance. Many OSS hospitals do not offer emergency services; and many control their demand as “closed door” facilities.

This is not to suggest that the superior performance, on average, of the OSS model is simply an illusion. Rather, this is merely a plea for modesty in “selling” the OSS model, noting that there are practical limitations to expanding this organizational innovation throughout the broader healthcare system. First, we must acknowledge that those large, less efficient state hospitals produce positive externalities for the health system as a whole in São Paulo. As our focus-group interviews demonstrated, OSS hospitals are spared the least common and most expensive medical cases that are handled by the large public teaching hospitals. Many doctors and nurses learn their craft at those hospitals, tackling the broadest range of medical cases. They can then take their talents to positions in OSS and private sector hospitals. The private sector, we were told, does not hire nurses without experience, and the public sector provides that experience.

Second, there are political constraints to expanding the OSS model that did not have to be confronted head-on when the first OSSs were established. Recall that São Paulo’s OSS experiment was launched in brand new hospitals. Therefore, they did not provoke strong labor opposition. Converting a direct administration hospital into an OSS is a different matter, as evident in the experience of Hospital das Clínicas Luzia de Pinho Melo. When a new wing was added to this hospital, increasing its size from 50 to 300 beds, the state initially intended to administer the “new” section of the hospital as an OSS while the “old” section would continue under traditional direct administration. It soon became clear, however, that two administrative models operating in the same facility was untenable. Thus, the SES determined to convert administration of the entire hospital and its 660 current state employees to OSS management. Several key reassurances were offered to current employees to avoid judicial challenges and mitigate labor union unrest before the OSS management contract took effect in October 2004: i) no employee would lose their current employment tie as a state employee; ii) salaries (including the PI) would not be reduced; and iii) those who did not wish to remain at the hospital administered as an OSS could receive a transfer to another state facility. One year later, only 268 (41 percent) of those 660 employees remained under the new OSS management.<sup>29</sup>

The experience of Hospital das Clínicas Luzia de Pinho Melo appears to confirm the supposition that many health sector employees prefer the less demanding work rules often found in conventional public administration hospitals, including the opportunity to negotiate their own work schedules, thereby facilitating multiple job-holding.<sup>30</sup> Moreover, it suggests that widespread conversions would run up against a daunting political and fiscal obstacle: the need to

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<sup>29</sup> Data kindly provided by Dr. Nacime Salomão Mansur, Superintendent of UNIFESP-affiliated Hospitals.

<sup>30</sup> According to the data provided by Dr. Nacime Salomão Mansur, the demand that employees fulfill their formal hourly schedules -- even as they received higher pay -- was the reason given by 102 doctors and 67 nurses/nurse assistants who chose to leave Hospital das Clínicas Luzia de Pinho Melo once it was converted to an OSS. Altogether, 121 doctors and 186 nurses/nurse assistants left the hospital for other public sector posts.



find posts for all the disgruntled employees seeking a transfer from their newly-converted OSS. For obvious reasons, these problems were sidestepped when OSS hospitals were created from scratch.

How, then, might the positive elements of the OSS model be extended? In late 2005 the *Ambulatorio Maria Zelia*, with 470 employees, was transferred from direct administration to OSS management, indicating that the performance contract model has not yet reached its limit in São Paulo's public health system. However, if we are correct in assuming that the OSS model cannot completely replace traditional public hospitals, how might human resource management in direct administration hospitals be improved, drawing on lessons from the OSS experience? The analysis presented here suggests three possibilities: i) improving procedures to discipline/fire, ii) enhancing managers' authority to hire, and iii) a more radical reform to create a new employment regime for healthcare professionals.

In 2002 the *Procuradoria Geral do Estado de São Paulo* promoted the strategy of the *Via Rápida* ("Rapid Path") as a means to hasten administrative procedures to dismiss non-performing or shoddy public employees. However, the Complementary Law that established the *Via Rápida* retains centralized disciplinary procedures, with a guaranteed right to defense that requires depositions of the relevant persons involved (e.g., managers, co-workers, subordinates). Thus, the practical effect of this policy has been minimal, at best. A true "*via rápida*" will require a re-balancing of the legitimate rights and protections of the employee with the legitimate need of the state to discipline or dismiss those employees who, to the detriment of their fellow citizens, do not adequately fulfill their work-related responsibilities. In that way, non-performing ("defecting") employees could be fired in a timely manner, rather than simply being transferred.

The second option centers on the authority to hire: granting public hospital managers greater discretion over staff composition and selection. For example, by allowing hospital directors to interview the top 3-5 people who sit atop the list of *concursados*, the merit principle would be protected while simultaneously enabling the director to shape the culture of the organization to generate greater collective commitment to the goals of the hospital. As we have seen from the field research for this study, generating cooperation does not require a pay-for-performance system. However, it does require managerial skill. Some managers can generate commitment and cooperation even under existing employment rules (e.g., the director of Vila Penteadó). But heroic, highly-talented managers are scarce. Adapting discretionary features of staff composition, personnel selection and dismissal in the OSS model to direct administration hospitals should, in the hands of well-intentioned managers, generate improved hospital performance.

While either of the first two options would be fraught with political and legal challenges, a third option is to craft for the state's health sector employees an entirely new employment regime that has more in common with the present-day CLT regime. To ameliorate the political opposition and legal challenges that such a proposal would engender, adherence to the new regime for current employees presumably would have to be voluntary. However, all new employees would be hired under the new statute; and gradually the management of human resources in the health sector would be transformed. We recognize that the constitutional mandate of a Single Juridical Regime for public employees in Brazil is a powerful obstacle to such a change. However, the case for reform is compelling.



### **3. MANAGING PRIMARY CARE IN THE CITY OF CURITIBA**

#### **INTRODUCTION**

Over almost four decades of steady development, Curitiba has emerged as an exemplary practitioner of the Brazilian model of public primary healthcare. This chapter seeks to understand how management practices, especially in the area of human resources, have contributed to this achievement. What are the various measures that Curitiba has taken to make its healthcare workers more performance-oriented, more attuned to their outputs (the services they provide) and outcomes (the impact of these services on the health of their clients)? Our particular concern is to understand how employee incentive schemes and management contracts might have made staff more performance-oriented.

Within Curitiba's primary healthcare system, this chapter concentrates on health clinics (i.e., the health units that provide non-emergency preventive and curative services) and primarily in the context of Brazil's national policy of primary healthcare reform (Chapter 1). This national policy played the leading role in defining the general trajectory of primary healthcare reform at the municipal level, and we shall see in this chapter what Curitiba did to make this national policy work at the local level.

While the starting point to this chapter – the relevance of employee incentive schemes and management contracts – appears narrow, the issues addressed will be broader. The kind of products an organization produces, the way it produces them, the way it is compensated, the quality of available human resources, and the environment in which it works (the way its clients relate to it and the way its owners direct its activities and facilitate its access to resources) all have an influence on the options available to managers. Thus, performance management tools must be examined in the context of the overall functioning of an organization. This chapter therefore looks not only at how healthcare is managed, but also at what the primary healthcare system produces, how medical/clinical and management issues relate to each other, and, briefly, how healthcare fits into the broader management and politics of the city.

To support the analysis, we carried out a confidential survey of perceptions concerning management issues among a sample of professional staff of Health Units. The survey is available as a separate document and its results are summarized in Appendix D. The results of the survey are generally in accordance with interviews we conducted in Health Units, Health Districts, and the Municipal Health Secretariat (SMS). In the end, because of the complexity of the SMS as an organization, we have primarily relied on interpretation and judgment, rather than numbers, to understand how the system works and why it came to be what it is.

#### **PRIMARY HEALTHCARE IN CURITIBA**

##### **The Approach to Public Healthcare**

Under the SUS, provision of services is decentralized as far as possible to states and municipalities and jointly financed by all three levels of government. Curitiba has full responsibility for all levels of health service (*Gestão Plena*). In 2005 its services were 60 percent federally financed, with the balance coming entirely from the municipality.

A dominant part of the city's primary healthcare (general medicine) and a substantial amount of secondary healthcare (specialized medicine) are in public hands. The municipality runs 110 of

the city's 281 ambulatory (primary and secondary) health facilities (Table 3.1). This includes 105 Health Units (*Unidades de Saúde*) in which 80 percent of the city's population is registered. These Units provide most of the city's primary healthcare and a large amount at the secondary level. (Table 3.2 provides a breakdown of employment in the Health Units by type of unit and type of worker.) Most tertiary-level care (hospitals) is in private or non-profit hands. The city pays these hospitals on a fee-per-service basis.

**Table 3.1: Number of Public and Private Health Units in Curitiba, 2005**

	Public	Non-profit	Private	Total
<b>Nível ambulatorial:</b>				
Unidades com Programa Saúde da Família	42			
Unidades de Saúde com especialidades	12			
Unidades de Saúde 24 Horas	5			
Hospital geral e maternidade	1			
Laboratório de Análises Clínicas	1			
Outras Unidades Básicas	44			
Total <i>Unidades de Saúde</i>	105	17	135	257
Outros	24			24
<b>Total</b>	<b>129</b>	<b>17</b>	<b>135</b>	<b>281</b>
<b>Assistência hospitalar</b>	<b>3</b>	<b>12</b>	<b>15</b>	<b>30</b>

Source: SMS website ([www.curitiba.pr.gov.br/saude](http://www.curitiba.pr.gov.br/saude)), 2005

**Table 3.2: Municipality of Curitiba: Employment by Type of Unit and Type of Employee**

	Unidades de Saúde					Other Med.	DS: Admin	SMS: Admin	Total
	PSF	UMS-24	UB	US Espec.	Sub-total				
<b>A. Number of units:</b>	45	5	47	11	108				
<b>B. Employment of Public Servants</b>									
Médico	202	*	255	113	570	7	28	188	793
Enfermeiro	144	75	94	24	337	5	57	61	460
Auxiliar de Enfermagem	485	330	585	120	1,520	4	49	60	1,633
Odontologo	125	32	199	41	397	10	44	41	492
Técnico em Higiene Dental	83	5	78	5	171		9	7	187
Auxiliar de Consultório Dentário	199	28	219	25	471	1	11	12	495
Agente Administrativo	57	16	53	36	162	5	32	64	263
Auxiliar Administrativo Operacional	75	43	58	17	193	1	11	26	231
Other	5	9	31	34	79	15	131	202	427
<b>Total</b>	<b>1,375</b>	<b>538</b>	<b>1,572</b>	<b>415</b>	<b>3,900</b>	<b>48</b>	<b>372</b>	<b>661</b>	<b>4,981</b>
<b>C. Employment of Agentes Comunitários de Saúde</b>	<b>1,140</b>								<b>1,140</b>

Source: SMS

Abbreviations:

PSF: Unidade Programa Saúde da Família (PSF)

UMS-24: UMS 24 Horas

UB: Unidade Básica

US Espec: Unidade de Saúde especializada

Other med: Other medical units

DS: Admin: Distrito Sanitário administration

SMS: Admin: Central administration & central services

Note: the numbers of Health Units differ slightly in Tables 1 and 2 because they are from different SMS periods.

\* Doctors in UMS 24 Horas Units are privately contracted.

Current primary healthcare in Curitiba reflects a philosophy built up over more than 25 years and owing much of its character to the Brazilian healthcare reform movement and the SUS, but also to more local developments. Based on descriptions of the system given by practitioners and from observations of how the system works, the following appear to be central elements of the primary healthcare philosophy (*modelo de atenção básica*):

- **Primary healthcare is based on a humanized and socially-oriented practice of medicine.** To caricature the traditional model, the doctor treats the body as a machine and cures through medical technology. A newer model envisages a broader team of health professionals which also prevents and cures through a greater attention to the particular needs and situation of an individual patient and a greater understanding of his/her environment.<sup>31</sup> This can change the typical role of the doctor from a leader of a team to a specialist within a team.<sup>32</sup> The new model is partly reflected in the principles of family medicine, where generalist doctors build long-term relationships with patients, put a patient's health in its social context, practice preventive as well as curative medicine, and are oriented to the well-being of a whole community.<sup>33</sup>
- **Primary healthcare is organized to focus on local problems.** Specific areas covered by different Health Units (and micro-areas within them) face specific health problems that can be attacked systematically. For instance, an area populated by industrial workers and one populated by poor rural immigrants face different problems regarding public health or levels of violence. This local focus is operationalized through a decentralized primary-care network of nine Health Districts, each with around 10 Health Units for primary care.
- **Primary healthcare emphasizes preventive practice.** Curitiba does this mostly through specific programs, for instance programs for safe pregnancies (*Mãe Curitibana*) or dental health for population (*Cárie Zero - Amigo Especial*).<sup>34</sup>
- More recently, Curitiba's approach has been to emphasize **evidence-based medicine**, medical practice based on scientific evidence, distilled where possible into standard operational processes (written up, as Curitiba has done, into specific protocols for treating specific problems).<sup>35</sup>

Consistently since 1979, the vision in Curitiba has been to replace a traditional public health system – combining vertical programs for specific conditions and curative medicine (emphasizing hospitals) – with a more preventive and family-medicine-oriented approach. The application of this philosophy has evolved over time (see next section). The system had to be decentralized as it grew and became more complex. And the family-medicine approach evolved, in the early 1990s, into the Family Health Program (PSF) model, a standardized approach to primary health

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<sup>31</sup> This is strongly linked to Brazil's healthcare reform movement (Movimento da Reforma Sanitária) and the theory that illness is socially determined (the "social theory of medicine"). For a short history of this movement, see <http://bvsarouca.cict.fiocruz.br/sanitarista05.html>. For an application to Curitiba of an approach akin to the social theory of medicine, see a study of children's dental health by Moysés (2000).

<sup>32</sup> See Porto (2001).

<sup>33</sup> See, for instance, Canada's Four Principles of Family Medicine (College of Family Physicians of Canada at <http://www.cfpc.ca/>). The Canadian government has, through the University of Toronto, worked closely with Curitiba on training in family medicine.

<sup>34</sup> Some of these programs are described in Ducci et al. (2001).

<sup>35</sup> "EBM is a conflation of three distinctive essences: an epochal scientific hypothesis; an ever evolving body of evidence; and an idealised professional process—a way of practising medicine." Reilly (2004)

emphasizing teams and community outreach. Curitiba's Health Units founded prior to this – now called Basic Units – were less standardized.

- PSF teams cover a population of 3,450 on average. They have a standard structure mandated by the federal government (which provides financial support to municipal PSFs). Each PSF Unit has a Health Unit manager (ASL) and three to four teams, each operating in different micro-areas. Each team has a staff of about nine public employees (one generalist family doctor, one nurse, three nurse's aides, a dentist, a dental auxiliary, a dental hygiene technician), and typically four Community Health Agents (ACS), employed under private labor law (CLT).<sup>36</sup> (See Table 3.) PSF Doctors (like PSF dentists) have a 40-hour week and have often made a career choice to enter family medicine. Community Health Agents – health workers with one-to-two years' training – make family and community visits and help ensure that all families are identified in the catchment area.
- Some Basic Units have been converted to PSF Units, but Basic Units still account for more than half of all of Curitiba's Health Units.<sup>37</sup> They are comparably sized with PSF Units (Table 3.3), but are not constituted in teams. They serve larger populations, and do not have the same resources to go out into the community. They have a looser structure: typically they have the equivalent of three full-time doctors (general practitioner, pediatricians, and gynecologists working a 20-hour week). Some ten Basic Units have a specialization (for instance in HIV/AIDS) and serve clients beyond their area.

**Table 3.3: Municipality of Curitiba: Average Number of Staff Employed in Health Units by Type of Unit**

	Unidade PSF	Unidade UMS-24	Unidade Básica	US Espec.	All Units
<b>B. Public Servants</b>					
Médico	4	0	5	10	5
Enfermeiro	3	15	2	2	3
Auxiliar de Enfermagem	11	66	12	11	14
Odontologo	3	6	4	4	4
Técnico em Higiene Dental	2	1	2	0	2
Auxiliar de Consultório Dentário	4	6	5	2	4
Agente Administrativo	1	3	1	3	2
Auxiliar Administrativo Operacional	2	9	1	2	2
Other	0	2	1	3	1
<b>Total</b>	<b>31</b>	<b>108</b>	<b>33</b>	<b>38</b>	<b>36</b>
<b>C. Agentes Comunitários de Saúde</b>	<b>14</b>		<b>11</b>		

Source: calculated from Table 2

Note: doctors and dentists in Unidades Básicas work a 20-hour week; other staff generally work a 40-hour week.

<sup>36</sup> In many Brazilian municipalities, PSF staff is employed under private labor law.

<sup>37</sup> It is the supply of family doctors that has prevented a faster expansion of PSF Units.

## The Main Features of Management

The Municipal Health Secretariat (SMS) has around 5,000 employees and accounts for one quarter of all municipal employment and one fifth of the municipal budget. Curitiba's primary-healthcare management policy is discussed at length below, and can be summarized as follows:

- The SMS pursues a strong client-orientation, by organizing its services to reach clients, by empowering the client, and by making the client's life easier.
- The municipality puts a strong emphasis on using social and medical knowledge and it has an advanced computerized information system which supports the use of knowledge and makes a complex management system work efficiently.
- The SMS has concentrated its resources (and its most important innovations) in the area of primary and preventive medicine. It has further sought to reap the benefits of specialization by emphasizing problem-specific programs and by standardizing medical and management processes. It also has had to invest heavily in systems to coordinate the various vertical and horizontal, private and public agencies providing health services, and to make the primary-healthcare network the gatekeeper (*porta de entrada*) for these services.
- Human resource management remains largely within the traditional Brazilian paradigm of the Public Servant (*servidor estatutário*). There is, additionally, substantial emphasis on training and professional development.
- Performance management is emphasized. Strategic planning has long been a norm of management behavior in Curitiba. More recently, the SMS has developed a management contracting system.

## Primary Healthcare Outcomes

The premise of this chapter is that Curitiba has a well-run health administration that produces results. The available evidence does not allow us rigorously to relate results to administrative practices. However, it is important to make some mention of the kind of evidence that leads to Curitiba's reputation as a strong performer in primary healthcare.

Fully 80 percent of Curitiba's population is registered in the public health system. (30 percent of the population is privately insured, but makes partial use of the public system – for vaccinations, for instance.) The users of Health Units appear to be happy generally with the services they receive, according to regular telephone interviews with a sample of the population.<sup>38</sup>

A recent study of the impact of public policy in Curitiba by the Municipal Institute of Public Administration (IMAP, 2005) pointed to some typical achievements of the health system:

- Health education has eliminated locally-originated dengue fever, improved the dental health of children up to 12-year-olds, and contributed to reducing unwanted pregnancies.
- Vaccination programs have reduced measles to near zero and dramatically reduced meningitis (*Haemophilus Influenzae b*) in infants after 1996.

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<sup>38</sup> Carried out every quarter since May 2004 by a separate government agency, this survey (*Avaliações da Comunidade*) elicits about 2,800 responses for Health Units (PSF and Basic Units) and over 300 for emergency Units. In the November 2004 survey, 87 percent of respondents found the physical installations of Health Units satisfactory; 61 percent considered the services good or very good, and 26 percent middling; and 76 percent had their problem resolved satisfactorily.



- A reduction in the number of newborns-at-risk since 1999 is believed to be the result of a new system that Curitiba pioneered to register and track all pregnancies and make home visits.
- The *Mãe Curitibana* Program has reduced mother-to-child transmission of AIDS (from nine percent in 2000 to zero in 2003) and reduced infant and mother deaths.

Sant'Ana et. al. (2002) studied the impact of the first PSF Unit, São José, opened in 1993. They found the following achievements:

- The Unit contributed to a reduction in infant deaths (there were no infant deaths in this PSF area after 1995), due to better pre-natal care and a decline in the share of adolescent and unplanned pregnancies. Child nutrition also improved.
- Health education was able to reduce the amount of hepatitis A infection (which resulted from children walking or playing in sewers).
- There was a dramatic improvement in the delivery of preventive services, reflected in a rise in blood pressure tests, PAP smears, infant examinations, and Type-II diabetes tests. Partly because a nursery was attached to the Unit, there was a decline from 1994 to 1997 in under-weight and under-height children.
- The Unit helped to encourage the local slum-dwelling population to clean up garbage, and health education led to a local demand for sewers (which were constructed in 1998).

Good, accurate information played an important part in these achievements.

Consistent with these healthcare outcomes, Curitiba has gained a reputation in Brazil for the quality of its primary healthcare system. For instance, it pioneered a procedure, now adopted elsewhere in Brazil, for registration and home visits for all births (*Declaração de Nascimento Vivo*, DNV). It was Brazil's first city to computerize the electronic medical records system (*Prontuário Eletrônico*). It is Paraná's only municipality to carry out drinking-water inspections. Curitiba provides HIV/AIDS indicators information for other local governments on PMC webpage MonitorAIDS. Curitiba's clinical protocols have become references for other Brazilian cities. It has won a number of prizes and awards (including for its PSF and the *Programa Mãe Curitibana*). Given that health services under the SUS are free, a consequence of Curitiba's success has been to draw in clients from outside Curitiba. This is a large problem for the city: 30 percent of registrations are estimated to come from people who live outside Curitiba.

Curitiba performs well for selected health indicators when compared to other municipalities with a similar epidemiological and demographic profile. In 2004, Curitiba ranked either first or near the top among comparable cities in a selection of robust indicators presented in Table 3.4. For instance, Curitiba has one of the lowest infant mortality rates in Brazil with 11.2 deaths per thousand births. This is the result of intensive pre-natal care since 80 percent of births are from mothers who attended to seven or more pre-natal consultancies. It also performs at the top for non-fetal deaths by non-defined causes, with 1.1 percent. Similarly, Curitiba reduced the inpatient rate for acute respiratory infection in children under five years from 18.1 percent in 2002 to 14.4 percent in 2004. The city has a high average of 1.6 annual medical visits per person in basic care. From 2002 to 2004, the interruption rate of tuberculosis treatment fell from 14.22 percent to 11.92 percent, a significant improvement.

**Table 3.4: Comparison of Curitiba's Health Indicators with other Municipalities with similar epidemiologic and demographic profile, 2004**

Ranking 2004	Annual average of medical visits per person in basic care		Percent of live births of mothers with 7 or more pre-natal care visits		Percent of non fetal deaths by non defined causes		Infant Mortality Rate		Inpatient rate of Acute Respiratory Infection ARI - to children under 5 years old		Interruption rate of tuberculosis treatment	
	Municipality	Visit/per person	Municipality	% Births/ 7 or more pre-natal	Municipality	% Non fetal deaths non defined causes	Municipality	Infant Mortality Rate	Municipality	Inpatient ARI p/1000 under 5 years	Municipality	% Interrupt Tuberculosis treatment
1°	São Luis	2.3	Campinas	84.8	Curitiba	1.1	Curitiba	11.2	Guarulhos	13.80	Campinas	10.13
2°	Curitiba	1.6	Curitiba	77.9	Guarulhos	1.1	Campinas	11.3	Curitiba	14.40	Guarulhos	10.74
3°	Porto Alegre	1.6	Goiania	74.7	Recife	1.1	Porto Alegre	12.2	Campinas	18.30	São Luis	11.56
4°	Duque de Caxias	1.5	Belo Horizonte	68.5	Goiania	1.3	Goiania	13.3	Belo Horizonte	24.30	Curitiba	11.92
5°	Belém	1.5	Porto Alegre	65.7	Campinas	1.6	Belo Horizonte	13.4	Porto Alegre	24.70	Fortaleza	12.01
6°	Recife	1.2	Guarulhos	60.4	Porto Alegre	2.1	Recife	16.3	Duque de Caxias	28.10	Porto Alegre	12.01
7°	Belo Horizonte	1.0	Belém	55.1	Belo Horizonte	6.3	Guarulhos	16.9	São Luis	30.80	Belém	12.25
8°	Goiania	0.9	Recife	50.4	Belém	8.2	São Luis	17.4	Recife	31.10	Goiania	12.43
9°	Campinas	0.9	Duque de Caxias	50.2	Duque de Caxias	9.0	Duque de Caxias	18.1	Fortaleza	39.30	Belo Horizonte	13.14
10°	Fortaleza	0.9	Fortaleza	47.0	São Luis	12.1	Belém	20.9	Belém	42.10	Recife	13.18
11°	Guarulhos	0.8	São Luis	38.0	Fortaleza	22.2	Fortaleza	20.9	Goiania	54.10	Duque de Caxias	17.52

Source: SIM/SINASC

Source: SIA/IBGE

Source: SIH/IBGE

Source: Sinan

## The Evolution of the Primary Healthcare System

Curitiba's primary-healthcare workers show a pride in the city's achievements that is reflected in a strong sense of history: they describe today's system as the result of a quarter-century of consistent development and problem-solving.<sup>39</sup> Table 3.4 provides a chronology.

This consistent line of development began in 1979 with the creation of a Health Department and the initiation of a healthcare model based on four principles: democratization of healthcare; extension of coverage and prioritization by level of care; integrated medicine; and community participation (Ducci et al, 2001:16). During the 1980s the city opened a number of largely standardized basic Health Units – many of these remain as Basic Units today. A body of health workers developed in parallel. Many of these workers have remained, and although they are now nearing the end of their careers, their corporate views on health and management still dominate the SMS. In the 1980s, health managers put a heavy emphasis on training and on the use of foreign models. The computerization process began in 1998.

The 1988 Constitution and the federal organic health laws of 1990 further embedded the principles of democratization and universality of healthcare in Brazil. These principles were in large part the product, like Curitiba's own reforms, of the Brazilian healthcare reform movement (*Movimento da Reforma Sanitária*). This was a remarkable revolution, in the context of Brazil's return to democracy, in which a professional group formulated a radically alternative policy, and then gained key political and bureaucratic posts to implement the new policy. In the 1990s the shape of primary-healthcare policy in Curitiba was substantially influenced by the federal government. Decentralization under the SUS gave municipalities the financial opportunity to develop their own health services, and the SUS also set the rules on both structures and processes that all municipalities had to follow. The PSF model was particularly important.

**Table 3.5: Chronology of Events Related to Health Sector Management in Curitiba, 1941-2004**

1941-43	<ul style="list-style-type: none"> <li>Curitiba's first urban plan, prepared by French architect Alfred Agache; the first public health unit is founded in 1941.</li> </ul>
1960s	<ul style="list-style-type: none"> <li>The Agache plan is improved by a group of architects and urban specialists coordinated by the Curitiba Research and Urban Planning Institute (IPPUC), founded in 1965. Through the <i>Fundação Serviços Especiais de Saúde Pública</i> (FSESP), with United States support, dental clinics are established in some public schools.</li> </ul>
1970s	<ul style="list-style-type: none"> <li>Large waves of immigration into Curitiba create slums (<i>favelas</i>) and increase the demand for public services in health and education. There is an increase in the number of Health Units.</li> </ul>
1978	<ul style="list-style-type: none"> <li>At the World Health Conference (Alma-Ata) some 130 signatory countries emphasize the importance of primary healthcare.</li> </ul>
1979	<ul style="list-style-type: none"> <li>Curitiba's healthcare model is formulated in the spirit of Alma-Ata and based on four principles (democratization of healthcare; extension of coverage and prioritization by level of care; integrated medicine; and community participation). Curitiba creates a Health Department within the Department of Social Development (DDS) and implements a network of 10 primary health units and 13 separate dental units.</li> </ul>

<sup>39</sup> For historical accounts, see: Ducci et al. (2001) on primary healthcare in general; Secretaria Municipal da Saúde de Curitiba (2002) on the PSF; Dercy Silveira Filho et al. (2002) on dentistry; and Venetikides et al (2001) on mental health.

1986	<ul style="list-style-type: none"> <li>• Curitiba creates the Municipal Health Secretariat (SMS).</li> <li>• At the <i>VIII Conferência Nacional de Saúde</i>, Brazil's health reform movement discusses the concepts of universal healthcare and decentralization that are later incorporated in the Constitution (1988) and Unified Health System (SUS) (1990).</li> </ul>
1988	<ul style="list-style-type: none"> <li>• Constituição Federal do Brasil (chapter on safety and health)</li> </ul>
1990	<ul style="list-style-type: none"> <li>• Lei Orgânica da Saúde (8080, 8142), a first direct impulse for reform.</li> </ul>
1991	<ul style="list-style-type: none"> <li>• First prototype family health center opens (<i>Centro de Saúde Pompéia</i>), based on foreign experience, with a pediatricist, gynecologist, and generalist, and later a dentist.</li> <li>• First Emergency Health Unit (24 hours) opens.</li> <li>• <i>Conselho Municipal de Saúde</i> (and first local councils) created in Curitiba, leading to the <i>I Conferência Municipal da Saúde</i>.</li> </ul>
1992	<ul style="list-style-type: none"> <li>• Curitiba acquires responsibility, from the State, for public health and primary healthcare. It decentralizes basic healthcare administration with the appointment of <i>Autoridades Sanitárias Locais</i> (to head Health Units) and <i>Gerentes de Distritos Sanitários</i> (to head seven Health Districts).</li> <li>• Health Units integrate medical and dental services.</li> <li>• Managerial problems (human resources weaknesses, information deficiencies, lack of financial resources), as well as political opposition, begin to affect the <i>Centro de Saúde Pompéia</i>.</li> </ul>
1993	<ul style="list-style-type: none"> <li>• Curitiba acquires responsibility, from the State, for hospitals.</li> <li>• SMS establishes a system to rationalize the purchase and supply of medicines (later to become <i>Farmácia Curitibaana</i>).</li> <li>• The family-health approach is pursued again through a new initiative, also with foreign assistance, but with considerably more community participation in study and design: <i>Unidade de Saúde San José</i> is opened.</li> <li>• Seven local conferences precede the <i>II Conferência Municipal da Saúde</i>. As a result, the family-health approach of US San José begins to be extended to other Health Units.</li> <li>• The city starts a telephone complaints and information line for public services (<i>Central de Atendimento ao Usuário</i>)</li> </ul>
1994	<ul style="list-style-type: none"> <li>• The IDGQ is established, a scheme of variable salary bonuses to encourage staff to locate in out-of-the-way Health Units.</li> <li>• A <i>Central de Marcação de Consultas Especializadas</i> is established to rationalize the process of referring patients from Health Units to other healthcare institutions.</li> <li>• A federal PSF is proposed, and SMS develops a plan to increase PSF Health Units in Curitiba.</li> </ul>
1995	<ul style="list-style-type: none"> <li>• Curitiba acquires responsibility, from the State, for secondary healthcare (<i>Sistema Ambulatorial</i>).</li> <li>• <i>III Conferência Municipal da Saúde</i>.</li> <li>• A new bonus scheme, PIQ, is introduced to give a 30 percent bonus to staff in some Units, after discussion and approval of the <i>Conselho Municipal</i>.</li> <li>• Three new PSF Units are opened. PSF staff in new Units receive a PSF bonus.</li> <li>• Training for PSF staff with a consultancy from Toronto initiates a "process of permanent education."</li> <li>• Management training for Unit leaders: <i>Curso de Gestão de Unidades Básicas de Saúde (GERUS)</i></li> </ul>
1996	<ul style="list-style-type: none"> <li>• Federal government enables <i>Gestão Semiplena</i> for Curitiba health system.</li> <li>• Curitiba adheres to federal PSF. Large expansion of PSF, with 18 new Units (new staff subject to <i>concurso</i>; revised level of bonus; substantial training).</li> </ul>
1997	<ul style="list-style-type: none"> <li>• PIQ terminated in 1997.</li> <li>• <i>IV Conferência Municipal da Saúde</i></li> <li>• Intensive PSF training continues.</li> </ul>
1998	<ul style="list-style-type: none"> <li>• Federal government enables <i>Gestão Plena</i> for Curitiba health system.</li> <li>• Universities play a stronger role in family-health training. A family-health professional</li> </ul>

	<ul style="list-style-type: none"> <li>association (FAMIPAR) is formed.</li> <li>Two more PSF Units are established.</li> <li>SMS begins work on client-friendly redesign of processes (<i>Acolhimento Solidário</i>).</li> </ul>
1999	<ul style="list-style-type: none"> <li>Following the Federal lead, Curitiba begins to employ, under private labor law, Community Health Agents (<i>Programa de Agentes Comunitários de Saúde, PACS</i>).</li> <li>I FAMIPAR Conference.</li> <li><i>V Conferência Municipal da Saúde</i></li> <li>Implementation of electronic medical records system (Prontuário Eletrônico) and computerization of the health municipal network</li> <li>Implementation of support centers</li> <li>Training for <i>Acolhimento Solidário</i> is started, process reengineering is started, and clinical protocols are prepared.</li> </ul>
2000	<ul style="list-style-type: none"> <li>II FAMIPAR Conference.</li> <li>Extension of PSF: eight new PSF Units are opened; one Health District (<i>Bairro Novo</i>) is completely converted to PSF Units and is reconfigured to cover more complex processes.</li> <li>Development of education and training on EBM (supported by University of Toronto).</li> <li>IDQ is created as an incentive scheme for performance bonuses on the basis of evaluated performance of the individual and the team.</li> </ul>
2001	<ul style="list-style-type: none"> <li>The <i>Centro de Educação em Saúde</i> assumes responsibility for training.</li> <li>The Prontuário Eletrônico de Saúde, a data warehouse/management system (incorporating medical records, systems for different health programs, and integrating Health Units with other services and functions), is fully running.</li> <li><i>VI Conferência Municipal da Saúde</i></li> <li>Evaluation of PSF staff and payment of PSF bonuses are rationalized.</li> <li>Five new PSF Units are opened.</li> </ul>
2002	<ul style="list-style-type: none"> <li><i>Sistema Integrado de Serviços de Saúde (SISS)</i> formalizes the establishment of a system for horizontal and vertical coordination among health services.</li> </ul>
2003	<ul style="list-style-type: none"> <li>The system of management contracting (<i>Termos de Compromisso/POA</i>) is initiated.</li> <li>VII Conferência Municipal da Saúde</li> </ul>
2004	<ul style="list-style-type: none"> <li>Regular telephone survey of Health Unit clients begins.</li> </ul>

Curitiba's first prototype family-health center opened in 1991. This was also the year in which organs of social control (Municipal and Local Health Councils) were established. The process of transferring to Curitiba responsibility for health, under the SUS, began in 1992 and was completed in 1998 (*Gestão Plena*). In 1993 the family-health-unit model crystallized with the creation of the São José Unit. The federal government proposed a PSF in 1994. At this point the primary-health model had more or less crystallized in its present form. Then, from 1995 to 2001, there was a strong expansion in Curitiba's primary-health system. The rate of expansion has since fallen.

In the early 1990s, as the health system expanded under the health model of SUS and the PSF, Curitiba began to recognize the growing problems – actual and prospective – of management: the system's growth was challenging the way that people, money, and information were managed. This recognition – the fruit of a tradition, if informal, of strategic planning – ushered in a new, more “managerialist” era. From around 1993-94, a process of more-or-less permanent management innovations began: the system was decentralized in 1992; measures to improve the quality of services to clients were initiated from 1993; pharmaceutical purchasing was rationalized from 1993; measures to articulate (integrate) the various parts of the health system began in 1994; the first of several staff-bonus systems was introduced in 1994; there was a large management-training initiative in 1995; medical training was put on a more systematized basis from 1995; new staff (Community Health Agents) were employed under private labor law from 1999; the information system was completely integrated by 2001; management contracting was

introduced in 2003. Curiously, the stream of major management initiatives appears to have slowed down after 2003.

This history is characterized by a high rate of innovation, first in healthcare (within a dominant guiding philosophy), then in management. Innovation occurred in an environment of rapidly growing demand for the city's health services. In the 1980s population growth was almost five percent a year (Table 3.5), as a result of continuing (but slowing) rural immigration. The population growth rate has since fallen (2.1 percent in the 1990s and 2000s). But in the 1990s Curitiba also had to assume the challenge, under the SUS, of taking over full responsibility for the health of its citizens. (Health expenditures grew dramatically from 8 percent of Curitiba's budget in 2000 to 20 percent in 2005.) In addition, the demographic and developmental transitions have changed the profile of health risks as the population has aged and the level of violent deaths has risen.

**Table 3.6: Curitiba: Population Growth, 1940-2005**

	Number		Periodic Growth rate
	Series A	Series B	
1940	140,656		
1950	180,575		2.5%
1960	361,309		7.2%
1970	609,026		5.4%
1980	1,024,975		5.3%
1990	1,608,151		4.6%
1991		1,315,035	
2000		1,587,315	2.1%
2005		1,757,900	2.1%

Source:

Series A: Rabinovitch and Hoehn (1995), Table 1

Series B: IBGE

### THE MANAGEMENT OF PRIMARY HEALTHCARE

The central aim of this chapter is to understand how Curitiba's primary healthcare system is managed, particularly human resources. To help do this, we carried out a survey of incentives for human resources in Curitiba's system (Appendix D). This survey paid particular attention to the way that performance contracting (*Termo de Compromisso/POA*) and the current bonus scheme (IDQ), worked.

We have grouped the various management instruments under five headings: client-orientation; information management; specialization; managing human resources; and managing performance. These instruments can aim to affect *either* health outcomes *or* management outcomes *or* both, and they affect each other.<sup>40</sup> The table in Appendix E synthesizes these measures and their effects. Our focus is on managing human resources and on planning and managing performance, rather than on the other three elements.

<sup>40</sup> Here is an example of how different systems can interact. Information systems improve epidemiological studies, which in turn contribute to better (evidence-based) medicine, which in turn allows integrated protocols to be established. These protocols help to improve management: first, they permit a greater integration of different medical services; second, they standardize clinical practice to the point where, with the aid of the information system, managers can more accurately monitor performance.

## Client Orientation

Curitiba took a series of steps in the 1990s to give its citizens greater access to health services, to give them a measure of “ownership” and power, and to improve the quality of the services they receive.

- **Reaching the client.** The construction of a decentralized system of Health Units linked by public transport began in the 1980s and was consummated in the 1991 decentralization into Health Districts. The Family Health Program (PSF), later reinforced by the introduction of Community Health Agents, was designed to create a more permanent link between health provider, the patient and its family. Beyond the better health outcomes that might be expected from this approach, decentralization also has management implications by shifting responsibility for results down the chain of command, to Health Districts, Units, and outreach workers.
- **Empowering the community.** Since 1991, tripartite Municipal and Local Health Councils (and later District Councils) have met every two years to discuss healthcare services. The Municipal Council has set up several commissions to make recommendations on specific topics (for instance on women, old-age, or the budget). It votes on the four-year Municipal Health Plan and on the health chapter of the annual Budget Planning Law (*Lei de Diretrizes Orçamentárias*) and reports on budget execution.<sup>41</sup> Local populations seem to consider that Councils are an effective channel for complaints and for proposing improvements.
- **Empowering individual clients.** Curitiba’s healthcare clients have also been individually empowered by a telephone complaint and information system for city services (*Central de Atendimento ao Usuário* (CAU), established in 1993) and, more recently, by twice-yearly telephone client surveys on Health Units (*Avaliações da Comunidade*).<sup>42</sup> Survey results at the level of the individual Unit provide community evaluations that form part of the current system of personnel evaluation (which in turn has consequences for the IDQ bonus). Our survey indicates that Health Unit managers are well aware of these evaluations and make use of them to improve client services. Empowering the community and individual clients allows the municipality to benefit from local knowledge and preferences with respect to health issues and services. It also allows the municipality, the monopoly supplier of a free service, to gauge whether it is providing the right service.
- **Making the client’s life easier.** In 1998, SMS proposed a set of actions, under the title of *Acolhimento Solidário* (roughly translated as “friendly welcome”), to reorganize the work process (and re-work the culture of the staff) in order to make access to services an easier and to dispose of cases more effectively.<sup>43</sup> The intention was to shift to a more quality-oriented approach across the broad range of activities of the Health Units. Protocols were developed to prioritize cases as clients entered the Unit in a way that minimized queuing. Unit work

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<sup>41</sup> Because there is prior consultation, the Council has never failed to approve a budget. The consultative process is now said to operate smoothly. But to some extent, the Municipal and Local Councils have become vehicles for party politics. Our survey found that, at the more hands-on level of management, especially performance contracting, the role of the Local Health Councils was more modest, though it did provide information about the community and identify problems.

<sup>42</sup> See footnote 38 above.

<sup>43</sup> The aims, instruments and results of *Acolhimento Solidário* are described on the SMS website (<http://www.curitiba.pr.gov.br/saude/>).

processes – in particular the nursing function – were then reorganized and staff intensively trained to apply the new procedures and to adopt a more client-oriented culture. The new practices were not introduced without resistance, but the SMS reports that changes in behavior and processes have reduced queues, improved the rate at which problems are resolved, and reduced complaints to the CAU.<sup>44</sup>

By emphasizing service quality and a participative or consultative approach, these instruments of client-orientation also have the political function of “selling” their service directly to voters.

## **Managing Information**

Curitiba’s approach to primary healthcare has required two principal forms of knowledge: social knowledge about clients and the environment they live in (c.f. the social theory of medicine), and medical knowledge of epidemiology (which is often related to social knowledge) and medical and clinical “best practice” elsewhere in the world. The municipality has developed an increasingly sophisticated information system to manage social knowledge and some medical knowledge, as well as to manage its healthcare system.

**Social knowledge.** The expansion of primary healthcare services has been planned on the basis of area-by-area socio-economic analysis. Central to the way Health Units function is the emphasis on better knowledge of individuals and families. Community health agents play an important role in this.

**Medical knowledge.** Given world advances in understanding of health problems and treatment technologies and the permanent experiment in effectively organizing public health services, the local collection and application of medical and clinical knowledge is a constant endeavor for any health authority. This effort occurs through systematized epidemiological activities, programs linked to universities and training institutes, and so on, such as the intensive training relationship with the University of Toronto.

More recently, a particular thrust in Curitiba has been the development of integrated protocols. These are manuals for clinical procedures in various areas (mental health, dental health, physiotherapy, hypertension, adolescence, and so on) which also serve the purpose of helping integrate primary healthcare (the entry point for clients) with specialized medicine and hospital services. These protocols are part of the evidence-based-medicine (EBM) approach that Curitiba has adopted. In addition to reflecting best health practice, protocols may have economic effects: by standardizing clinical practice, they permit (in theory at least) greater economies of scale and make it easier for managers to measure performance (see Box 3.1).

**The information system.** Curitiba has a very advanced information system (under construction since 1988), built on a number of computerized data bases that communicate with each other. At the heart of the system is the *Prontuário Eletrônico*, a completely computerized patient medical-records system, with medical, dental, and nursing modules, established in 1999 (see Cazura Xavier and Shimazaki, n.d.). Each person registered in the system has a magnetic card (*Cartão Qualidade Saúde*) which allows them access to their records and to health services. The *Prontuário* is an instrument in clinical management because it is compatible with the Integrated Protocols.

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<sup>44</sup> Complaints about Health Units have to be reported to the Local Health Council. See Ducci et al. (2001:109-115) for a description of the process by which complaints are followed up.



The *Prontuário* is in turn integrated with other IT systems (some of which provide an interface with private providers), including the *Central de Regulação* (which allocates hospital beds for specialized-medicine and hospital resources financed by the federal government), *Central de Procedimentos* (which sets appointments for consultations, examinations, and therapies), *Laboratório Municipal*, Pharmacy, *Centro de Epidemiologia* (where disease information is obligatorily notified, then transmitted to federal Ministry of Health systems), *Sistema de Informação Gerencial* (to monitor performance), and various municipal systems outside of SMS (citizen identification, human resources, etc.).

### **Box 3.1: The Role of Protocols**

The SMS sees the advantages of protocols as standardizing medical information and providing consensus among teams. The adoption of protocols was negotiated between technical staff, directors and scientific societies. In the beginning, the doctors were resistant but after the entry of scientific societies in the discussion, they changed their position. Indeed, they came to see protocols, with their support from scientific societies, as a protection against claims of medical malpractice.

Protocols also improve the procurement process since only a pre-determined set of medicines is purchased for the entire network. This permits economies of scale. The SMS guarantees the availability of drugs in the Health Units' pharmacies and guide doctors to prescribe them, given scientific evidence. The SMS also believes that protocols save public funds that could be lost in lawsuits against the state.

Another advantage is that protocols are part of the SMS management information system. A doctor who attends a pregnant woman, for instance, knows all the exams the patient has already undergone (i.e. pre-natal exams, sonograms) and what others she still needs. The protocol's indicators are monitored and will later feed into the reports about the accomplishment of POA's targets.

Sometimes doctors do not fill in the information properly or do not follow the agreed procedures. To check on this, designated doctors (who are allowed access to confidential information) monitor the use of protocols in a sample of Health Units. The intention is for each Health District to have one doctor specialized in monitoring protocols.

According to those working in the sector, the information system has had clear health and managerial outcomes (Cazura Xavier and Shimazaki, n.d.):

- It has systematized nursing practice and led to changes in the way dentistry is done (and required the development of dental health protocol training).
- By facilitating the monitoring of individuals, families, and populations at risk, the system has enabled coordination of health actions; epidemiological information is more timely; laboratory results are returned quicker.
- The system has integrated different services: clients find that their appointments are set more efficiently (and that they have greater choices); there is better management of hospital bed allocations.

In addition, Curitiba's system of performance management, emphasizing performance contracting and teamwork is greatly facilitated by accurate measurement of more standardized processes.<sup>45</sup> But, as the managers of this system recognize, implementation has posed, and continues to pose, management challenges.

## **Specialization and Coordination**

A complex system (doing many different things to produce a service or range of services) must create an internal specialization of tasks so that each thing can be done well. But the system must also design a way of making all these separate parts work together.

**Vertical Specialization.** The municipality is the dominant producer of primary and preventive health services, many of which are considered public goods, more appropriate for government production.<sup>46</sup> The municipality also finances and regulates (rather than produces) much secondary and most tertiary health services, which are largely private goods. The shift to preventive and primary medicine is also the central feature of Brazil's (and Curitiba's) strategy to control the costs of public health.

**Horizontal specialization** has been promoted in two ways: concentration on specific problems and diseases by means of Programs and programmed activities (*Atenção programada*) for groups of patients (diabetics, for instance); and the standardization of processes, both administrative (occurring in conjunction with computerization) and clinical (as a result of the Protocols). Specialization should improve efficiency through greater economies of scale.<sup>47</sup> Standardization also facilitates managers' ability to monitor performance.

**Coordination of services:** the process of coordinating the many aspects of a complex system of healthcare provision can be said to have begun in 1994 with the establishment of the *Central de Marcação de Consultas Especializadas*, and to have culminated in 2002 in an integrated system of services (*Sistema Integrada de Serviços de Saúde*), underpinned by communicating computer systems and by integrated Protocols. The primary-healthcare network is the gatekeeper for the entire public health system. By controlling the access of patients to other services and tightly coordinating the different levels of services, the SMS seeks to provide appropriate and timely health services to citizens and to rationalize the use of public resources.

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<sup>45</sup> Our survey respondents overwhelmingly (93 percent) acknowledged the importance of the information system in identifying problems. They saw its greater impact in epidemiological knowledge, faster service, team productivity, and reaching contractual targets.

<sup>46</sup> Public goods are generally available to all consumers at the same time, and one person's consumption does not reduce the supply available for another consumer.

<sup>47</sup> The Aravind Eye Hospital in India is a well-known example of economies of scale through specialization – in this case in cataract surgery (See Rangan 1994). With less than one percent of the country's ophthalmic manpower, Aravind performs about five percent of all cataract surgeries in India." (<http://www.aravind.org/about/index.htm>).

## Managing Human Resources

The SMS has a workforce of just over 6,000 (Table 3.2):

- There are almost 5,000 public servants – three times the number of the early 1990s. These are permanent career employees. 40 percent of them are professionals (Superior); 44 percent are at the Intermediate level; and 16 percent at the Basic level.<sup>48</sup>
- Just over 200 of the career professionals are managers who occupy, for the duration of the appointment, a politically-appointed post.
- Almost 1,200 people are employed under private labor law (CLT) as Community Health Agents.

**Careers of public servants in healthcare.** The structure and rules for public servants in Curitiba are constitutionally mandated and resemble those for other Brazilian jurisdictions. Entry into the career is based on academic qualifications and a written public examination (*concurso público*) and the top candidates assume an Office (*cargo*) defined by a narrow occupational group: doctors, dentists, and nurses are offices at the Superior level, and auxiliary nurses at the Intermediate level. After a three-year probationary period, they receive lifetime tenure.<sup>49</sup> New entrants start at the bottom of a career and regularly and automatically advance within and between grades. There is no possibility of lateral movement outside the given Office.<sup>50</sup>

Health jobs are professions in themselves: people typically become doctors, dentists, and nurses for life. In the public sector, the most obvious career-development path typically available is to gain, temporarily or permanently, a management post (a political appointment). Within the SMS, there is one career move that has aspects of career development: the move from a Basic Unit to a PSF Unit (via an internal public examination) results in more money and a different (more team- and community-oriented) job. There is a heavy demand for doctors in Basic Units to pass to PSF Units. For most health professionals, satisfaction comes from the job itself, not advancement prospects. In the SMS, part of this satisfaction also comes from the frequent opportunities for training and professional development. (We come back to job satisfaction in a discussion below on performance culture.)

Most health professionals have the choice to work in the public or private sectors. For doctors and nurses in particular, the jobs in each sector may be quite different because of the public sector's emphasis on primary healthcare and preventive and family medicine. In practice, nurses, auxiliary nurses, and dentists are in adequate supply, and the public sector pays them at rates that are competitive with the private sector. Some of these professionals typically have made a career choice based on their preference for what the public sector does in healthcare. As a result, there has been a reasonable stability of public sector healthcare employees, which has probably helped foster teamwork and increase experience in Health Units.

Doctors are different. First, the profession exercises an effective control on entry into medical schools. This has raised the price of doctors and lowered their numbers on the Brazilian labor

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<sup>48</sup> Three-quarters of those at the Intermediate level are auxiliary nurses. They have just been upgraded (with a corresponding salary rise) from the Basic level. To consolidate this change, auxiliary nurses must now undergo a process of training and certification.

<sup>49</sup> Following a 1998 constitutional amendment, public servants can in theory lose their jobs for poor performance; in practice, this is hardly known.

<sup>50</sup> Some auxiliary nurses hope to move up to the higher Career of nurse, for instance by going to night school, then taking the public examination.

market. Second – and notwithstanding the Brazilian healthcare reform movement – the preference of most doctors (reflected in the availability of university training courses) is to specialize rather than practice general, or family medicine. However, the federal PSF has since 1996 developed a new labor market for generalist doctors: doctors who take up posts in PSF Units have a greater tendency to stay in the public sector than doctors in Basic Units. And in recent years, federal funds have been used to force the universities to begin to adapt medical and nursing curricula.

The scarcity of doctors has implications for the turnover of doctors and the way they are employed. 30 percent of doctors appointed to the SMS leave in the first year, usually for the private sector. Curitiba's doctors (like doctors elsewhere in Brazil and in many poorer countries) hold multiple jobs – an average of two to three jobs (and up to five), each formally requiring 20 hours of work a week. Often, this multiple-job strategy seeks to combine the benefits of higher salaries in the private sector (in clinics and hospitals) with the higher prestige, greater learning opportunities, and non-salary benefits (particularly pensions) of the public sector. The doctor's work week in a Basic Unit is 20 hours; in a PSF Unit it is 40 hours, a reflection in part of a bonus scheme that is discussed below.<sup>51</sup> Nonetheless, doctors seem to be the weakest link in Health Unit teams because of turnover and multiple-job holding.

**Bonus schemes.** The SMS has had several systems for bonuses on top of basic salaries. There have been three systems whose purpose has simply been to raise the level of remuneration in an area where the labor market was supplying too few qualified people.

- From the beginning of the PSF, all public servants in PSF Units have been eligible for a bonus funded by the federal government. Subject to receiving a satisfactory annual evaluation: doctors and dentists receive 80 percent of their basic salary, nurses 60 percent, and auxiliary nurses 50 percent. Repeated absence and lateness disqualify staff from their bonus. A less-than-satisfactory evaluation two years in a row would lead to staff being moved elsewhere in the SMS. This happens to almost no staff. Thus, the PSF bonus acts as a general incentive to attract staff to the PSF Units, more than to stimulate their performance while they are there (except in extreme cases).<sup>52</sup>
- The first scheme independently introduced by SMS was the IDG, a bonus introduced in 1994 to encourage staff to work in dangerous and less accessible areas of the municipality. Health Units were rated in three categories according to the level of difficulty faced by personnel. This system proved to be controversial because it caused disputes with Health Units that were rated in the least difficult category. The IDG was soon abandoned (and now the factors that gave rise to it have more or less gone away).
- In 2002, SMS introduced a Special Bonus for Doctors (*Gratificação Especial para Médicos*, GEM) equal to 20 to 40 percent of the basic salary. Since 2002 the turnover of doctors has fallen, and it is thought that this incentive is largely responsible.

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<sup>51</sup> Health workers failing to complete their prescribed hours does not appear to be as common in Curitiba as in other jurisdictions.

<sup>52</sup> The PSF Units are staffed through an internal competitive process (*concurso* plus interview) open to qualified SMS staff. This system was introduced to provide for a legitimate appointment procedure that helps to counteract any disincentive effect that Basic Unit staff feel as a result of getting lower pay for similar work. Our survey suggested that, surprisingly perhaps, there was little sense of a difference in effort and performance between PSF-Unit and Basic-Unit staff.

The SMS has also experimented with two schemes to encourage better performance. The first of these was launched in 1995, when the SMS felt the need to create a performance incentive to support the drive for greater quality in health services. The Quality Incentive Plan (PIQ) established a bonus for all SMS Units, with the exception of PSF units. Based on performance according to a small set of indicators (health outcomes and health and management outputs), the staff in around 10 percent of the units were rewarded with a 30 percent bonus. This scheme turned out to be even more problematic than IDG. The focus of the teams became one of simple compliance with a checklist. Moreover, senior managers in the SMS perceived that the team-based nature of the incentive provoked rivalry among teams and undermined the unity of the system as a whole. The PIQ was terminated in 1997.

The current scheme, the Incentive Program for Quality Development (IDQ), was created in 2000, at a point where there was a rapid expansion of PSF Units. Each quarter, SMS workers are evaluated to see whether they qualify for a 20 percent bonus of their monthly base salary (in the case of a few Units the bonus goes as high as 40 percent). All SMS employees are eligible except some political appointees (*cargos em comissão*). The IDQ evaluation is based on four elements: the supervisor's evaluation of the employee, self-evaluation, SMS evaluation of the Unit, and community evaluation of the Unit (see Box 3.2 for more details).<sup>53</sup>

### Box 3.2: The IDQ Evaluation System

The IDQ is based in four elements of evaluation. Each element receives a score of 0-100 which is weighted into a final score of 0-100. An employee with a score above 80 points will receive the monthly bonus, but there are specific “excluding factors” – repeated absence, penalties received, abnormal leave periods, or late arrival – which disqualify the employee from receiving the bonus. The four elements (and the weighting) are as follows:

- *Individual Evaluation of the employee* (weighting 45%). The immediate superior makes a preliminary evaluation halfway through the quarter, then again at the end of the quarter. The criteria are: knowledge, professional attitude, interpersonal skills, work quality and compliance with administrative rules. This evaluation provides a feedback to employees about their performance and indicates specific actions to enhance quality and productivity. A minimum of 80 points is necessary to be eligible for the bonus.
- *Self Evaluation* (weighting 5%). At the end of the quarter, each employee assesses his/her own performance, behavior and productivity in relation to the expected outcomes, using the same criteria.
- *Health Unit Evaluation* (weighting 35%). This evaluation, at the end of every quarter, assess whether the performance targets set by the Health Unit were achieved. The targets analyzed are performance indicators from the management contract (*Termo de compromisso*).
- *Community Evaluation* (weighting 15%). The SMS uses quarterly sample telephone surveys (*Avaliações da Comunidade*) to ask about the quality of treatment and services. The Units with scores above 70 percent (“excellent” and “good”) are eligible to participate in the IDQ program.

Over 90 percent of employees win the bonus each quarter (Table 3.7). Most of the others are disqualified because of “excluding factors” (leave, absence, lateness, etc.). Prolonged absence

<sup>53</sup> In a separate scheme, Community Health Agents (ACS) can also earn a 20 percent bonus for having reached the work targets set for them.

(*afastamento*) is the overwhelming cause. The number of eligible employees excluded by low performance is very small: around 20-30 people in the first two quarters of 2004, none in the subsequent three quarters, rising to more than 100 in the last three quarters of 2005. SMS reported that low performers are known and usually are the same people. Their managers try to assign these employees to other jobs, to which they might be better suited. The SMS is also reported to be raising standards of performance over time (this is consistent with the rising number of poor-performance cases in 2005).<sup>54</sup>

**Table 3.7: Performance under the IDQ, 2002-2005**

Year	Trim	Participants	Bonus received	Bonus not received, by category of disqualification:					Total
				Poor performance	Leave	Absence	Penalty	Late-ness	
2002	I								
	II	1,584	93.3%						6.7%
	III	1,592	92.7%						7.3%
	IV								
2003	I	3,002	94.4%						5.6%
	II	3,080	95.5%						4.5%
	III	3,076	90.7%						9.3%
	IV	3,400	91.7%						8.3%
2004	I	3,700	93.5%	0.5%	4.1%	1.2%	0.1%	0.7%	6.6%
	II	4,582	90.8%	0.6%	6.5%	0.7%	0.3%	1.2%	9.2%
	III	4,842	90.5%	0.0%	6.8%	0.8%	0.3%	1.7%	9.6%
	IV	4,835	91.3%	0.0%	6.4%	0.8%	0.3%	1.5%	8.9%
2005	I	4,865	90.8%	0.0%	6.3%	0.8%	0.0%	2.1%	9.2%
	II	4,738	93.6%	2.1%	2.7%	0.3%	0.2%	1.1%	6.4%
	III	4,918	87.8%	2.6%	7.2%	0.5%	0.2%	1.7%	12.2%
	IV	4,864	89.6%	2.8%	5.3%	0.4%	0.1%	1.8%	10.4%

Source: IMAP (2002-2003) and SMS (2004-2005)

Those disqualified from the bonus for poor performance account for a very low share of total participants (less than 1 percent in 2004, but rising above 2 percent in 2005). Where so few cases are caught, it is reasonable to suppose that the scheme is only catching very extreme cases of poor performance and that it is not acting to stimulate better performance in general (in the way a sales commission does, for example). However, the results of our survey seem, at first sight at least, to contradict this. Ninety percent of respondents thought that IDQ had an influence on behavior when it was introduced. Consistent with the pattern of qualification and disqualification in Table 3.6, this influence was considered greatest in the area of workplace behavior (discipline, punctuality, and so on). But it was also perceived to have improved motivation and, to a lesser extent, work organization and productivity. The survey also suggests that respondents feel that the impact has fallen over time: only 61 percent believed that IDQ at present continues to provide an important influence on behavior.

<sup>54</sup> It is often observed that evaluators in Brazil (as elsewhere in Latin America) are reluctant to give someone a low performance evaluation. This may be because the prevailing culture value equal treatment more than rewarding merit; or it may reflect a fear that loyalty and friendship are more likely to be rewarded than merit.

Sometimes, management innovations tend to have a short-lived effect: they enhance performance initially when they are still a novelty and provide a spotlight on workers, but as they lose their novelty, workers adjust their effort back to the norm: the IDQ may be one such innovation. But according to our survey, the IDQ may also have had a more valuable side effect that, hopefully, will last longer. It seems that the IDQ process may act as a motivator through the evaluation process itself. This process is perceived to be fair and coherent and to contribute most by promoting employee-supervisor dialogue (rather than by direct reward/punishment, except punishment on account of “excluding factors”). For instance, it is perceived to help solve team conflicts. Collectively passing the IDQ test is a major preoccupation of teams (72 percent say this is “always” so and 25 percent “frequently” so). When a problem is perceived with a staff member, the team acts to solve it. Thus, it may be that the enthusiasm (if waning) that staff show for the bonus as a management tool relates to evaluation as a tool for identifying problems, rather than the bonus as a performance-enhancing reward system.

**Managers.** All managers in the SMS (around 215 posts) are political appointees (i.e., they serve at the pleasure of elected officials).<sup>55</sup> By tradition, these managers, including the Secretary, are also public servants from the SMS. (They tend to come more from the ranks of nurses and dentists than doctors.) When they no longer have the political appointment, they are free to resume their normal career (office) within the Secretariat. Managers are appointed at four levels: at the top (the Municipal Secretary of Health); then Directors; then District Health Supervisors and Coordinators; and finally, Health Unit Managers (ASLs). People occupying these positions get small increments to their salaries as public servants.

The structure of management is very flexible: there are only four levels in the hierarchy and managers can rise up from the ranks of professionals, and then return to being a professional. The tradition of appointing all managers from within the SMS also means that managers, though politically appointed, share the same culture as their non-manager colleagues. This reflects the limited influence of party politics on healthcare in Curitiba.

## **Managing Performance**

**Strategic planning** and systems thinking have been a central habit of mind among health managers since a Health Department was created in 1979. Up to the early 1990s the main aim of planning was to define and implement the primary healthcare model and to develop appropriate human capital. From the beginning of the 1990s to around 2004, a central theme was to make performance central to management. From the mid-1990s to the early 2000s, another central target was the physical expansion of primary healthcare capacity. Strategic planning has been practiced both informally and formally. Among the foremost examples of formal strategic planning was GERUS, a management course for leaders of Health Units undertaken in 1995 with the aim of setting a track for reorganizing basic healthcare.<sup>56</sup> After a year-and-a-half of reflection, GERUS generated a number of proposals that substantially shaped the managerial innovations of the 1990s, including the development of the information system and of performance targeting. Many aspects of Curitiba’s healthcare-management system are informed by systems thinking: for instance, information systems have consciously changed management

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<sup>55</sup> There are also over 300 nurses in the Health Units (Table 3.2) who, though they are not formally managers, frequently play a leading role in teams (doctors generally do not).

<sup>56</sup> GERUS was a national program, supported by the Pan-American Health Organization, and applied locally by Curitiba (see Bertussi, et al. 1996).

methods (and vice versa); the introduction of integrated protocols has similarly contributed to changes in management methods.

Strategic planning has also become a more formal, routinized activity which has paved the way for formal performance management. Health planning in Curitiba is mandated by federal legislation (Law 8080). Curitiba has a four-year plan which is a product of the Municipal Health Council meeting in its Conference (the Curitiba Municipal Health Plan 2002-2005). The plan sets out desired outputs and outcomes: how health services are to be delivered, how services are to be managed, and how major medical problems are to be tackled. The plan concentrates far more on primary health than tertiary. It is detailed in indicating a number of objectives for health-system outputs and outcomes, but these objectives tend to be fairly general and often unmeasurable (for instance: "Population satisfaction with health system" or "Consolidate the System of Food and Nutritional Control). The plan does not quantify these objectives (many of which are difficult to measure), nor does it describe the steps that need taking or estimate the money needed to attain them. It is the fruit of strategic thinking. For instance, a principal concern is to chart the reorganization of primary healthcare according to the principles of the Integrated System of Health Services (SISS). But because it does not really chart how objectives are to be attained, it is something less than a strategic plan.<sup>57</sup>

The Municipal Health Plan (four-years) is translated into more specific actions in the Annual Operating Plan (POA), which uses the same format to set targets for the coming year. In turn, a number of quantitative indicators have been developed since 2000 to help, where quantification is possible, to make the strategic POA targets more operational. Some 60 indicators are enshrined in annual Management Contracts (*Termo de Compromisso de Gestão*) between the SMS and the Health Districts, and between the latter and the Health Units. The Management Contracts appear to provide an effective means of reinforcing the performance orientation of the staff in primary healthcare. This is quite a rarity in Brazil and in many other countries.

**Management contracting.** The Management Contracts are simple: they summarize the general obligations of principal and agent towards each other and set specific performance indicator targets. For the contracts between SMS and the nine Health Districts there were 55 indicators in 2005 and for the contracts between Health Districts and Health Units there were 63. No rewards or punishments are directly associated with performance under the contracts.<sup>58</sup> However, 35 percent of the points awarded individuals under the IDQ evaluation system depend on the Unit's performance under the Management Contract. We discuss this further below.

Targets are agreed in discussions between the SMS and the Health Districts and between the latter and the Health Units. Some of the indicators are agreed upon with the Ministry of Health, regarding targets of coverage, visits and procedures. Target-setting takes into account differences between areas (for instance, the more middle-class the neighborhood, the more inhabitants are likely to use private health services) and differences of installed capacity. According to our interviews and survey results, targets are fixed between Health District and Health Unit with a mix of negotiation and imposition. But the Health District is open to re-negotiation when there

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<sup>57</sup> Strategic planning is based on a vision of how the world is likely to change in the medium- to long-term, and aims to shape an organization's future by defining its goals and how it will achieve them. It is a process of continuous learning.

<sup>58</sup> Thus, they have the characteristics of a relational contract, a quasi-contractual agreement getting its strength not from formal sanctions, but from the shared needs of principal and agent to do business together over the longer term. Unlike some relational contracts, the SMS Management Contracts are, through the agreed targets, highly specific about some aspects of expected performance.



are difficulties in fulfillment. This would suggest that there is a reasonable balance between the “top-down” direction and “bottom-up” participation that many consider necessary for good management.

The effectiveness of the contracting system depends on the quality of the indicators, so that participants have less opportunity to “game” the system.<sup>59</sup> The construction of an advanced information system from 1999 (the *Prontuário Eletrônico*) led to faster and more accurate information, while the Protocols developed under the Integrated System of Health Services (SISS, 2000) led to more standardized definitions. Every month the management information system transmits performance data from the Health Units to their Health Districts. Every quarter the data are sent from the Districts to the SMS, which carries out a comparative analysis and reports to the City Council and the Municipal Health Council on the progress of the POA. The number of indicators has grown over time and the SMS continues to seek improvements in the indicators (in the case of tuberculosis, for instance).<sup>60</sup>

**The impact of management contracting.** The most important value of management contracts appears to lie in the way they provide signals to individuals and teams about performance expectations, identify problems they need to solve, and promote teamwork. (See the comments from one Health District in Box 3.3.) The survey found a (surprisingly) high level of enthusiasm for management contracts: an overwhelming number of respondents found the exercise useful (and not excessively costly to them).

- *Expectations*: the process of negotiating contractual targets helps fix staff expectations: 85 percent of survey respondents found the contracts substantially or entirely useful in establishing priorities.
- *Problem-solving*: the process of monitoring and discussing performance under the contracts feeds back into the organization of work: it is an instrument of strategic planning at the local level. The Districts regularly consult with the Units on their performance. The SMS, in turn, meets with the Districts. These meetings examine indicators, identify poorly-performing Health Units, and identify problems. Following these meetings, the SMS and the District provide help to the Health Units through training and exchange of ideas. Eighty-one percent of survey respondents found the contracts substantially or entirely useful in **identifying problems**, and 72 percent found the contracts useful in **solving problems**. The survey also found that management contracting helped create links with a broad variety of other municipal-government services; this is, presumably, a particular instance of the problem-solving function.

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<sup>59</sup> Under Britain’s National Health System, one of the indicators to assess hospital performance is the amount of time patients admitted to hospital wait before they get to a ward. One imaginative hospital got around this indicator by declaring that the corridor where the patients were waiting was a ward.

<sup>60</sup> Appendix F provides some illustration of the indicators with target and performance data for eight of the indicators relevant to contracts between the SMS and the Health Districts. Those indicators with area populations in their denominator are subject to the distorting factor that many non-Curitibaans use the city’s public health facilities. There is no weighting of the indicators, or provision of key indicators, but it appears that some indicators, such as those relating to safe pregnancies and infant deaths, are more closely watched than others. For all the targets, including the eight in Appendix 3, there is a wide range of over- and under-fulfillment. This may be because it is so difficult to set accurate indicators, but it also clearly suggests that monitoring performance under targets is not a *pro-forma* activity.

- *Teamwork*: management contracting is part of a broader set of management instruments involving staff evaluation and incentives (IDQ) and Community Evaluation. Taken together these instruments support a teamwork approach, both in everyday operations and in problem-solving. Teams are well aware of Community Evaluations and make use of them. This chapter has argued that the IDQ probably does not function as a performance incentive in the classic manner; but the survey emphasizes that it is a vehicle for staff evaluation and for the identification and solution of problems that relate to team performance. There was a strong perception – 92 percent of respondents, shared by staff of PSF and Basic Units alike – that teams worked well. According to the survey, ensuring that staff gain the IDQ bonus is a major preoccupation of teams: 50 percent of an individual’s evaluation depends on team performance (35 percent on performance under the management contract and 15 percent on the Community Evaluation). Teams, when they perceive a problem, will, most often, talk to an under-performing colleague or else adjust work processes.
- *Competition among Health Units*: Health Unit managers are reasonably aware of how other Units are performing. But the survey suggested that staff generally hesitate to openly judge the performance of other Health Units (and, if they judge them, hesitate to find them better or worse). It can be inferred from this that there is no strong sense of rivalry between Health Units and that trying to foster inter-unit competition as a motivation for better performance may be misplaced within the particular culture of Curitiba’s public administration.<sup>61</sup>

### **Box 3.3: Management Contracts – One Health District’s View**

A meeting with the supervising staff in one health District provides a view of how management contracts contribute to performance. Their main impact is to provide accurate information, establish shared objectives, and underpin trust and problem-solving.

The system could not work without the quality of information provided by today’s information system. One of the things that defeated the PIQ bonus scheme of 1995 was that teams could cheat because the quality of information was poor. In fact, when the new information system was established in 2000, levels of measured performance in this District fell.

The level of trust established between District and Unit is high. District supervisors have all worked in Units and may go back to working in them. When a problem arises in a Unit, trust paves the way to cooperation, not defensiveness.

Various approaches to solving work-process problems have been developed: visits to units (especially working with nurses), group discussions among nurses, and so on. When one unit told the District that it could not achieve a particular target related to the number of cases of hypertension registered, the District suggested novel ways to do detective work to find the clients or, if necessary, to explain the shortfall.

**A performance culture.** Performance management is associated with a thriving performance culture among health workers in Curitiba’s public sector. Staff behave as team players and

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<sup>61</sup> A similar argument is often made with respect to Brazilian public servants’ cultural aversion to being evaluated and compared with others (e.g., Vaitsman 2001). However, as a generalization, such a cultural argument should be received with skepticism, as blanket statements are often made in the name of culture.

problem solvers because they have intrinsic motivation in their belief in the values and objectives of the SMS. Extrinsic motivation – “I do it because I’m materially rewarded” – is always important, but it does not appear to dominate in Curitiba. According to the survey, respondents reported that they were motivated by extrinsic factors (job stability and nearness to home), as well as intrinsic factors (job content, learning opportunities, training opportunities). They reported that salary levels and flexible hours were less important. This sense of professional motivation did not differ much between PSF and Basic Units. The general enthusiasm of professional SMS staff for their work comes through in interviews. It is also expressed in the astounding amount of effort staff voluntarily put into preparing professional papers for the biennial meetings on public health that SMS organizes for primary-healthcare staff.<sup>62</sup> Porto (2001, page 5) provides some quotes from staff working on the *Programa Mãe Curitibana* that capture the culture: “I love my work. It’s engrossing (nurse’s aide)”; “If someone says that they come to the PSF for the love of it, it isn’t true. But after they see what is going on here, they get to love it (health agent).”

It is by no means clear that SMS management practices alone created this thriving performance culture. However, it is clear that a performance culture is in the air of Curitiba. We discuss this in the next section.

### THE ELEMENTS OF GOOD PERFORMANCE

We have postulated in this chapter that Curitiba has a primary healthcare system that has performed well, and we have sought to explain the ways in which the system is well-managed. In this final section, we synthesize the main characteristics of this performance, discuss some of the factors that may help explain how this good performance came about, and try to draw out a few implications from this case.

We suggest five salient characteristics of good performance in Curitiba. First, Curitiba adopted **innovative health policies that have worked**. These policies, many of which came from the SUS, in turn dictated much of how the health system had to be organized: decentralized, client-oriented, using standardized procedures. These features (by accident?) turn out to be compatible with performance management.

Second, the managers of the SMS **understand how to manage complexity**. They have been able to design and manage complex, interacting systems and to use information technology to help coordinate them. (The table of Appendix E tries to capture some of the ways in which different systems, whether intended as instruments of healthcare or management, interact.) A sophisticated information system appears to be an important condition for coordinating different systems. It is of particular interest here because reliable information underpins the successful management-contracting system.

Third, and addressing the concerns that originally prompted this chapter, good performance is driven by a **strong performance culture**. This culture is characterized by a shared belief in Curitiba’s primary-healthcare mission, an aptitude for teamwork, and an orientation to uncover and solve problems. This chapter has touched on some of the elements of this culture, but cannot explain it completely.

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<sup>62</sup> Secretaria Municipal de Saúde de Curitiba (2004) lists 240 resúmenes of professional presentations for the 2004 meeting.

- Formal planning and management contracting did not create the culture, but they support it because they are an added tool to fix expectations, solve problems, and foster teamwork. Indeed, Curitiba's system of management contracting provides a good example of relational contracting at work.
- Bonus systems in Curitiba have not worked, in a direct way at least, to promote performance. One of them, PIQ, sought to promote competition between teams, but this competition proved destructive and the scheme was soon abandoned. The current scheme, IDQ, deals with egregious performance problems (lateness, etc.), but we do not think it has directly affected the performance of most workers (even though our survey respondents thought it did). However, it has had important indirect effects: staff evaluations under the IDQ have reinforced the performance effects of management contracting; it is a preoccupation of teams to solve individuals' performance problems so that team objectives (performance under the management contract and a satisfactory evaluation by the community) are met.
- Thus planning, management contracts, and the IDQ (through its staff-evaluation function) turn out to be interesting instruments that **support** a performance culture, but they do not **explain** it. The explanation, we surmise, has to lie in environmental and historical elements which we discuss below.

Fourth, some of the reforms we have mentioned helped to **mitigate the principal-agent problem** that characterizes the health sector: inasmuch as professional health workers have specialized knowledge, it is difficult for their managers (principals) to control what they do (as agents), just as it is difficult for their patients (as principals) to control what professional health workers do (as agents). Curitiba modified the principal-agent relationship through reforms that standardized the product (medical knowledge, clinical procedures), improved the information system to capture this standardized information, and used this standardized information to clarify the performance expectations that managers had of health workers. These reforms somewhat centralized discretion over medical decisions, while other reforms partly decentralized implementation decisions. Municipal and Local Health Councils, the telephone complaints and information system, and community evaluations (telephone surveys) have also helped to reduce the asymmetry of information between health workers and patients.

Finally, one might speculate that a **process of uninterrupted growth and change** has been important in helping to drive this culture. Today's system is the result of a consistent line of development since 1979; this has required constant innovation in the medical/clinical and managerial fields, as well as capacity expansion (in response to the city's growth as a result of immigration and of the municipalization of health). Permanent change has meant a succession of challenges and required a permanent attention to problem-solving. Permanent change has also meant a continuing increase in the size of the workforce. This has provided greater opportunities for career development and may also have helped minimize the negative impact of tenure rules that protect under-performing staff.

The Curitiba case raises two related questions. First, where did its performance culture come from? Second, what allowed this culture to thrive under a civil service regime that is not ostensibly oriented to performance? At this stage we can only offer a mix of analysis and hypotheses (in the hope that these hypotheses might fuel subsequent work on the policy reform process in health). We suggest three separate sources of influence on performance:

- The Brazilian government, through the SUS, provided a workable **policy** (a set of operational rules) and a guaranteed level of health **financing**.

- The *sanitaristas* constituted a professional network that, we hypothesize, provided **expertise** (a set of working beliefs and practices consistent with SUS) and contributed to a strong **work ethos**.
- We also hypothesize that the Curitiba city government provided **political continuity** and the tool of **strategic management** for the health sector.

We discuss each of the three influences in turn.

### **The Environment for Performance I: SUS**

In the 1990s, the SUS, implemented by the Ministry of Health, earmarked and decentralized health budgets on the one hand, and provided a policy model for primary healthcare reform on the other. Some of the features of basic healthcare management that can be observed across many municipalities reflect health and management philosophies which initially stemmed from the ideas of the Brazilian healthcare reform movement and were articulated and refined by the federal government under the SUS. Common to this health philosophy are: humanized and socially-oriented medicine, a focus on local problems, and preventive medicine. Common to the management philosophy are: the move to highly-structured teams using standard procedures (PSF and Community Health Agents); decentralization within cities; Health Units as gatekeepers to more complex curative services; clearing houses for appointments and hospital beds; formal health planning; institutions of social control (including municipal health conferences); and telephone hotlines. The influence of the SUS on Curitiba's primary healthcare system is clear.

### **The Environment for Performance II: Health Professionals' Networks**

Curitiba's healthcare sector has been affected by two overlapping sets of networks (people or groups that associate to pursue a collective objective). The first is composed of the various medical professions; the second is the *sanitaristas*, a group of primary-healthcare workers in the public sector which grew out of the healthcare reform movement.

Doctors and other healthcare workers are among the most powerful professions in Brazil, as in other countries. Their specialized knowledge and their organization have given them a presence in Brazilian government that is probably stronger and more cohesive than any other professional group. This is a major reason why health spending is constitutionally guaranteed. Like many professional groups, the objective of healthcare professional groups is to serve their members' interests, in particular by maintaining a self-regulating monopoly. Given the asymmetry of information between health professionals on the one hand and their political masters and the public on the other, controlling entrants to the profession and maintaining a set of behavioral standards are meant to assure the public that the professional is acting in public interest. The process of standardization that has been occurring through the PSF (and even more markedly in Curitiba) threatens to weaken this monopoly by increasing the information available to politicians and the public. It is therefore perhaps no coincidence that doctors, the most highly organized of the healthcare professionals, have been less enthusiastic than other healthcare professionals about primary-healthcare reform.

The *sanitaristas* are not a formal group, but bring together, more or less, the primary-healthcare workers of the public sector (and cut across the healthcare professions). Apart from a common interest in securing more resources for the sector, the objectives and impact of this network have not been the same as those of the professions, particularly doctors. Initially the network had the characteristics of a policy community (a network involved in a particular area of public policy).

Born in the 1960s and 1970s, before Brazil's return to democracy, the healthcare reform movement adopted a very political view which linked health to social conditions and to democracy, and took on the responsibility for political action to pursue its beliefs.<sup>63</sup> It was this movement – in the absence of an articulated popular demand for reform – that dictated the health clauses of the 1988 Constitution. Later, this led to the SUS and a well-defined model for primary-healthcare reform. The movement's members sought positions in government from which they could protect and implement the new policies.

With this policy objective largely achieved, the network of *sanitaristas* that grew out of the healthcare reform movement also became a community of practice (a network of people who collaborate to share ideas about, and find solutions to, common problems). The *sanitaristas* circulate within a large, mobile labor market for workers in public health at all levels of government. There are substantial interchanges of people and information through this job market, through formal organizations – such as the Association of Family Health and the National Council of Municipal Health Secretaries (CONASEMS) and the Brazilian Association of Graduates in Collective Health – through associated Congresses and other meetings, and through academic faculties that teach in the area of primary healthcare.

The network of *sanitaristas* brings to the SMS in Curitiba a group of workers with a common experience, a common understanding of the problems and of the tools to solve them, and the bonds of belonging to the same network. It is particularly important that most of today's senior managers were all products of this network and lived through Curitiba's healthcare reforms. It is reasonable to infer that this movement has been most helpful in imparting specialized knowledge to Curitiba's healthcare workers, providing a strong working ethos that motivates performance and the sharing of knowledge, and thereby facilitating their work in teams. (See Box 3.4 for a more theoretical argument about how networks might affect performance incentives.)

### **The Environment for Performance III: City Management**

Curitiba has an outstanding city management that is known the world over. Quite a lot has been written about Curitiba, most of it describing and praising the innovative solutions to problems of urban services, much of it ascribing these achievements to urban planning (see, for instance, Gnatek 2003). But there is less analysis of management methods and on the particular politics that allowed Curitiba to flower.

Curitiba is best known for its innovative public transport system – based on planned bus routes and dedicated bus lanes linked to urban zoning (see Santoro and Leitmann 2004). But it is also famous for its environmental policies: it recycles 13 percent of its trash; it is the city with the largest proportional amount of green spaces in Brazil; it has developed industrial zones with low-environmental-impact industries. Curitiba is citizen-friendly in other ways, as well: it introduced the first pedestrian streets in Brazil; it has a network of one-stop citizens' shops (*Rua da Cidadania*). It is reported that 99 percent of Curitibaanos say they would not want to live anywhere else (McKibben 1995).

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<sup>63</sup> See Fundação Oswaldo Cruz (n.d.).

### Box 3.4: Networks and Performance Incentives

Miller (1992) argues that economic incentives are insufficient for managing complex organizations because agents can always find ways to cheat their principals (i.e., information is asymmetric). Thus “political” mechanisms to improve credible commitment, hence cooperation, become important. Using game theory, he points out that it can be in the mutual interest of agents to cooperate if they believe that they have a long-term future in the organization (which makes cooperation and its fruits a “repeated game”), if they engage in activities that create a shared confidence that others will cooperate, and if they have some reciprocal ability to punish non-cooperators. Horizontal cooperation in smaller teams, he argues, can be reinforced by informal social rituals of reward and punishment, while vertical cooperation between subordinate and superior can be reinforced by creating enough trust to allow each side to reveal more information. Inculcating a sense of common identity and purpose is central to this.

Miller applied his analysis of mechanisms of cooperation to the private firm. His analysis also applies to public hierarchies; but networks outside the hierarchy can also help foster cooperation. Indeed, this can often be one of their main purposes. (On networks, see Thompson 2003).

An economic network is a group of people (or organizations) who associate in order to pursue common objectives that have the character of public goods for that group (goods available for all of that group to consume regardless of who pays and who does not pay). Such group public goods include: the public reputation of members for acting ethically and knowledgeably; the mutual trust of members so that they may cooperate with each other (in work teams or through inter-firm contracting); and the advocacy of policies of interest to members.

The public-goods nature of their objectives means that networks have to overcome a free-rider problem: members can benefit without contributing to the provision of the public good. Networks therefore need to find instruments to encourage members to conform to expected behavior (notably, to act consistently with the desired reputation or act to share knowledge). *To the extent they can do this*, networks clarify the expected standards of behavior of their members; restrict membership to those more likely to conform to these standards, and to a number consistent with profitable collective action; educate entrants to create an ethos consistent with these standards; punish non-conformance with the standards (ultimately by excluding members from the network); and support standards of behavior by force of law (to make it costly to be excluded from the network).

Conforming behavior in networks thus results from a mix of motivations that are extrinsic (economic incentives such as the fear of exclusion) and intrinsic (ethos). (Note that according to Miller’s analysis, the intrinsic motivation is consistent with long-term self-interest.) If the network functions effectively, this mix of motivations produces predictable standards of behavior that, by benefiting the group, benefit its members.

Curitiba’s period of intensive urban innovation began in the 1960s, with the creation of a city planning agency, the Research and Urban Planning Institute of Curitiba (IPPUC).<sup>64</sup> The strategic-planning approach of the urban planners has become a dominant paradigm of city management.

<sup>64</sup> On IPPUC see Campbell (2006).

Formally, IPPUC produces a master plan for the city which it monitors and updates constantly. But Curitiba's strategic planning can also be characterized as a fairly "soft" approach to management, inasmuch as it emphasizes a culture, or mindset – about imagining a future and seeing how to organize and coordinate resources to get there – rather than the "hard" rules of systems for human resource management or financial management. This strategic-planning approach was characterized by the report of a study tour from New Zealand that visited Curitiba in 2003 (New Zealand, Parliamentary Commissioner for the Environment 2002) and illustrated in interviews with Curitiba's two longest-serving mayors since the 1960s (Gnatek 2003). The New Zealand study tour (which was intent on learning lessons for sustainable urban development) concluded that the forces behind city management in Curitiba were quite different from those in New Zealand. Box 3.5, quoting from their report, provides a thoughtful outsider characterization of the "Curitiban Way."

### **Box 3.5: New Zealand Tries to Understand Curitiba**

In 2002 a study tour of 20 New Zealanders visited Curitiba to learn lessons for the sustainable development of New Zealand's towns and cities. They were highly impressed by what they found – "a healthy ecology, a vibrant economy, and a society that nurtures people." New Zealand is acknowledged as one of the leading exponents of performance management in the world. It is, therefore, interesting that discovering the way that Curitibaanos went about running and improving their city should come as something of a culture shock for New Zealanders.

"Talking with people who were on the tour is critical because what this report cannot do is adequately articulate the initial difficulty the group had in relating to the 'Curitiban Way'. This is the focus Curitibaans have, for example, on relationships, quality of life, systems thinking, master plans, long-term visions, smart public/private partnerships and a bias for action. It was difficult to relate to the way Curitibaans have approached their development. As a group of Kiwis we have had nearly 20 years exposure to a diet heavily laced with process orientated legislation and policies (an outputs as opposed to outcomes focus), intense application of commercial competition models, separation of policies from delivery functions, effects based environmental legislation, and the rights of the individual having supremacy over the collective (community). Initially we were too focused on the processes, the accountabilities, a mechanistic frame of reference. Our challenge was to realize that in many ways they have had a very different set of values driving their evolution."

"They value relationships highly. They create long-term visions of what might be; delivering results to all in their society by iterations. They champion and grow leaders and are very focused on people and enhancing the quality of their lives and maintaining consistent governance. Above all they focus on getting things done in ways that constantly turn every challenge faced into an opportunity somewhere in society. This very systems thinking approach is woefully absent in many New Zealand social and environmental programmes."

Source: New Zealand, Parliamentary Commissioner for the Environment (2002)

Notwithstanding Curitiba's "soft" approach, the New Zealand study tour report observed some "hard" elements in Curitiba's approach to management:

- The city is aware of the interconnectedness of different city needs and services, hence the need to integrate different sectoral policies. IPPUC takes a leading role in this.



- Policy innovations adopt flexible, experimental approaches, using evaluation and consultation with the community to adjust policies.
- Policy tools are not necessarily original, but they are applied pragmatically and combined in innovative and effective ways.<sup>65</sup>
- Good information underpins other policies. The city puts significant resources into urban research and making its results available.
- The city invests in listening to its citizens, through regular public hearings, hotlines, and an array of web-based resources. Citizens are keen users of these channels to report problems.

It is also clear that Curitiba has invested significantly in human resources. The city places a strong emphasis on meritocratic entry of new public servants, educational qualifications, leadership, and training.<sup>66</sup>

**The politics of city management.** Curitiba's achievements have been secured in a singular political environment. There has been a remarkable political continuity: technocrats have played a powerful role as political entrepreneurs, and they have been able to provide consistent, coherent leadership. Urban planners (i.e., technocrats) first defined policy trajectories, then came to dominate the city's political life and ensure political continuity. Since 1971, Curitiba's two longest serving mayors (Jaime Lerner and Cassio Taniguchi) have spent 20 years between them in that office. Both came into politics from IPPUC. With the experience of several decades of improving city services, citizens understand that they have a stake in the system and that they have a voice, and they have voted for continuity.

Evans (1997) suggests that Curitiba's benign form of constructive, democratic politics has been underpinned by some particularities. He mentions two necessary factors. First, he agrees (quoting Ames and Keck 1997) that Curitiba did not have the dominant traditional oligarchy that typified much of Brazil. The power of traditional elites was further diluted by new immigrants arriving in the later nineteenth century to become independent farmers. The lack of dominant elites encouraged the growth of collective institutions and the provision of public goods. Second, political entrepreneurship, which legitimized planning, was also a necessary part of the explanation.

**City management and healthcare management.** The management style of SMS clearly bears much in common with other parts of the city's administration. The same strategic-planning approach is central. Policies are applied flexibly and progressively. The interconnectedness of the different systems that combine to produce effective health services is well understood. Good information is emphasized. Client feedback is important. Human resources are nurtured. And like city leadership, the leadership of the SMS has been technocratic and it has benefited from continuity. It is plausible to argue that public healthcare has benefited greatly from Curitiba's management traditions.

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<sup>65</sup> In similar vein, Evans (1997) argues that bus transportation is a clever public-private partnership "carefully shaped by the visible hand of public planning and regulation."

<sup>66</sup> Curitiba's Secretariat of Human Resources (SRH) administered a merit-evaluation system for all municipal staff from 1991 to 1997. Evaluation results influenced the speed of promotions, but did not affect levels of remuneration. The system came to an end because of a decision by Brazil's Supreme Court that evaluation of performance was unconstitutional. SRH is now introducing a new evaluation system which will determine promotions and provide for bonuses. The system is based on evaluation of competencies which have been mapped by each sector.

It can also be argued that Curitiba has good political reasons to emphasize the provision of social services. Evans (1997) has pointed out that Curitiba's politicians have long had to manage the challenge of conflicts resulting from immigration into the city. Curitiba has seen a very high rate of immigration – at times the highest in Brazil – some of which is, of course, the consequence of its very success as a city. Hence, the city has had to find ways of winning over the newly-arrived poor in the urban periphery. In this light, the effectiveness and expansion of health services can be seen as a political imperative in the struggle to acquire the political support of new immigrants.

### **The Environment for Performance: a Confluence of Factors**

Our discussion of the different sources of influence on performance has inevitably been speculative and should ideally be confirmed through further study, particularly of the policy-reform process. Bearing in mind the tentative nature of our observations, we can observe a fairly complex pattern of influence in which there are important complementarities:

- While the SUS in many ways provided the lead in policy design, this lead was supported by the network of *sanitaristas* who brought a set of working beliefs and practices consistent with SUS. The leadership of the SMS, in turn, emphasized the importance of learning from foreign models.
- Similarly, the SUS provided a guaranteed level of external health financing, while the city government showed a strong commitment to providing additional funds.
- The mitigation of the principal-agent problem was partly effected through the standardization process inherent in the design of SUS primary-healthcare policies, while SMS policy innovations (standardization of clinical procedures and ICT) also contributed.
- Contributions to the performance culture came from several directions. We hypothesized that Curitiba city management traditions were important in establishing the approach to strategic management (and the ability to deal with complex systems) characteristic of the SMS. The leadership of the SMS refined several instruments to support the performance culture: a relational-contracting system, team incentives (IDQ), and telephone surveys of users. The network of *sanitaristas*, we suggested, made an important contribution (unusually important, perhaps, for a network) to a strong working ethos. The city government may also have contributed in this respect.
- We also hypothesize that the Curitiba city government provided crucial political continuity for the health sector.

Thus, several distinct sources of policy change worked together to create a performance-oriented system. Each source may have been necessary, but not sufficient. In the case of two sources of influence, the SUS and the network of *sanitaristas*, all Brazilian jurisdictions could, to some extent, benefit. This suggests that the role hypothesized for the Curitiba city government cannot easily be ignored.

The relationship between the working ethos in the SMS and the regime for public servants is worthy of some final speculation. Brazil's regime for public servants produces a meritocratic civil service that should be the envy of most other Latin-American countries. Curitiba reinforces this regime by paying its health workers reasonably, and they continue to benefit during their careers from a good training system. So the public service statute does not appear, at first sight, to have proven a problematic basis on which to build a performance culture. But many in Brazil and

elsewhere criticize, with some justification, the traditional policy model of the tenured Public Servant as one that does nothing for performance.<sup>67</sup>

Is this the case in Curitiba? Clearly, the working ethos is strong in the SMS, and it is tempting to think that this strength is sufficient to counteract the incentives to under-perform that might reside in the public servant statute. But it is equally plausible to argue (consistent with the incentives model presented in Box 3.4) that a strong performance ethos and employment stability provide complementary conditions for creating an incentive to cooperate: the statute creates the belief among workers that they have a long-term future in the organization, while the ethos creates a shared confidence that others will cooperate in the future.

### CHALLENGES FOR PERFORMANCE

**How easy would it be to replicate the Curitiba experience?** Replicators need to exercise caution for several reasons. First, the story we have told is one of complexity and nuance: a set of interacting systems developed over 25 years and underpinned by a strong and enduring performance culture which is as much driven by informal values as it by formal design. Second, a department with 5,000 staff is by many standards modest in size, hence more easily managed: coordination mechanisms are easier and smallness makes it more likely that the most important senior staff – notably managers and nurses – will know each other personally. Third, Curitiba’s experience occurred within a particular set of historical conditions, including the city’s broader reform experience, the Brazilian healthcare revolution, and the rapid expansion of demand for primary healthcare in Curitiba.

With that caution in mind, would-be replicators need to understand how healthcare reform, systems thinking, and performance culture have interacted in Curitiba’s case and how today’s system is the result of a long process of investment in ideas. In other words, it would be useful to understand how Curitiba has applied strategic planning. It has applied it more as a methodology (or work habit), than as a formal process – a methodology that has pervaded the organization from top managers to the operational level. It has involved a mindset that thinks about the future, looks for and solves problems, understands systems complexity (and understands that changes in one place create problems and opportunities elsewhere). It is empirical, experimental, and takes risks. The formal tools of performance management are an adjunct to, not a driver of, strategic planning.

**What are the problems that Curitiba’s healthcare managers need to be thinking about?** “If it isn’t broken, don’t fix it.” But beyond this, several points may be worth making.

- It is worth considering whether the largest threat to Curitiba’s system might come from a fall in the rate of expansion and innovation in the system. This need not necessarily happen since Curitiba’s population continues to grow rapidly and Curitiba will continue to face the same drama of escalating costs and uncontrollable demand as other public-health organizations. (Moreover, there is probably a significant reform agenda in secondary and, especially, tertiary healthcare). But a casual impression is that the rate of expansion and innovation may have fallen in the last couple of years. Lower rates of expansion of the workforce may make it more difficult to absorb poor performers who have tenure. Lower expansion may also reduce job satisfaction: new professional opportunities and new problems to solve would be fewer.

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<sup>67</sup> See, for instance, Bresser Pereira (1999, chapter 16).

- We suggested in this final section that part of the strong working ethos that motivates staff performance comes from outside the sphere of health management – from the attitudes that workers derive from the network of *sanitaristas*, a network in turn rooted in the health reform movement. To the extent this so, this ethos may gradually fade over time as the health reform movement goes further back into history and the current generation of leaders retires. Maintaining historical levels of intrinsic motivation may therefore provide a challenge.
- Having had the experience of dysfunctional rivalry created by the team-based bonuses of PIQ, it seems that the SMS was sensibly cautious, when it introduced the IDQ, to ensure that the new system of bonuses for individuals only punished staff in extreme cases. It should continue to be cautious about introducing bonus schemes that reward individuals or teams. But its experience may enable it to design more effective schemes in the future. The experience may suggest that, with good measurement of outputs, a more graduated and selective bonus (distinguishing the best, the worst, and the middling employees, and providing for different levels of reward), and a less generous average bonus, team bonuses might work for Curitiba.
- Finally, if Curitiba’s performance has been supported by the expertise and ethos that the network of *sanitaristas* has brought with it, it should also be pointed out that professional networks can have a downside: they can become a source of myopia when the domination of one view of what a policy should be discourages other points of view to be presented. The general reluctance to consider private-sector solutions in primary care, contrary to international trends, may be an example of such myopia. There is also a downside to guaranteed funding of health spending under the SUS: managers are relieved from being as conscious of costs as they would otherwise be. Several factors may make for a financially less rosy future – rising costs of medical technology, the epidemiological transition, the pressure of “health immigrants” on the city’s primary-healthcare capacity. Brazil’s and Curitiba’s health planners may have to consider radical alternatives for rationing demand.

## **4. OVERCOMING AGENCY PROBLEMS: CONCLUSIONS AND POLICY IMPLICATIONS**

Our study began as an assessment of the effects of specific organizational and managerial innovations – with a focus on human resource management – and concludes with a nuanced interpretation of some of the elements conducive to enhancing public sector performance. A central message is that there is no magic bullet, whether in the form of an organizational change or a cutting-edge managerial instrument. Enabling environments matter, and so does the manner in which change measures are introduced. The two cases we have examined offer interesting and complementary insights about how to design and implement managerial innovations. A particular challenge in strengthening performance management, independent of a specific organizational setting, is policy makers’ and managers’ ability to overcome the agency problem that characterizes the relationships between those who demand performance and those who deliver, and to elicit voluntary cooperation by the employees to pursue the organization’s corporate objectives. In this final chapter, we situate these cases within a broader context of economic and management theories, as well as recent international developments in public management reforms; and we present general policy implications.

The problem of information asymmetry – patients who cannot determine the quality of the services they receive and managers whose ability to monitor the provision of services by their staff is limited – is particularly acute in the health sector. The relative success of performance management in São Paulo and Curitiba owes much to the governments’ effectiveness in reducing this information asymmetry, a main driver of the principal-agent problem. Our São Paulo case study has shown that the relative effectiveness of the OSS hospitals is due partly to the more flexible human resource management authority these hospital managers can exercise. Meanwhile, primary healthcare in Curitiba operates within the generally rigid public sector model. However, the case study suggests that under certain (perhaps exceptional) circumstances, the much-maligned direct administration model can support accountability for performance. In the next section, we will reinterpret the two cases from the point of view of agency theory, and highlight how São Paulo and Curitiba addressed the agency problem.

### **SOCIAL ORGANIZATIONS AS CORPORATIZATION**

#### ***Making the Managers Manage through Performance Contracts and Letting Managers Manage through Flexibility***

Creating Social Organizations to run public hospitals in Brazil is a form of “corporatization” of public services. Corporatization attempts to utilize the “high powered” incentives of markets – whenever feasible – in contrast to the weak and often untoward hierarchical incentives typical of government bureaucracies. Hospital corporatization in São Paulo is consistent with this prescription: government retains ownership of the hospital and public responsibility for healthcare, but introduces organizational reforms intended to improve performance by mimicking private sector incentives. Procedural (*ex ante*) controls are reduced, while simultaneously focusing managerial attention and accountability on outputs.<sup>68</sup> The objective is to allow the managers of public hospitals to exercise the same authority as their private sector counterparts, but without losing government control over the quantity and quality of services provided, or the population served.

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<sup>68</sup> See L. R. Jones (2004) for a recent debate on the meaning and merits of “new public management.” The article also has a number of references to recent studies of NPM-style reforms (and counter-reforms).

A key characteristic of corporatization is that it separates the payer (government) from the provider (in this case, hospital management). Principal-agent theory helps to explain the roles of these two actors. The payer (i.e., the principal) specifies the goals or outputs desired. Operational decisions are then left largely to the discretion of the provider (i.e., the agent). Procedural monitoring by the principal is kept to a minimum, as a management contract supplants hierarchical control as the means through which public resources are allocated and performance accountability measures are specified. São Paulo's Secretariat of Health has delegated decision-making authority to the managers of particular public hospitals. Thus, there is a key principal-agent relationship between the Secretariat of Health (principal) and the hospital manager (agent). In addition, there is a principal-agent relationship between hospital managers (principals) and their staff (agents). The rationale for payer-provider splits is to encourage greater mission clarity and to better align the individual incentives of managers and service delivery personnel with public policy goals.

Like most attractive reform ideas, implementation presents numerous challenges. Management contracts are inherently incomplete, as it is impossible to anticipate every contingency and specify all actions in a contract in a way that would be enforceable. It is difficult for the principal (the Secretariat of Health) to anticipate actions by the agent (hospital managers) to keep costs down or improve quality.<sup>69</sup> In order to achieve her objectives, the principal must rely upon the agent to exert adequate effort and apply his discretion appropriately. However, the principal is limited in her ability to monitor the agent's actions. Information that is known to the agent can be masked or withheld from the principal (e.g., information related to the effort expended by the agent). Thus, ameliorating these information asymmetries, or reducing their importance, is a central challenge of contracting between principal and agent. Transaction costs – defined by North as the “cost of measuring and enforcing agreements” (1990:14) – can be prohibitive when putting contract-style reforms into practice.

### **Corporatized Hospitals in São Paulo**

If introducing a public sector performance contract in commercial sectors is difficult (see Box 4.1), the challenges in the health sector are even more acute. In a fully commercial sector, the market transmits information on service/product quality to customers, who in turn will exercise their choice of “exit” to weed out poor performers. In the health sector, the “customers” (patients) are not always in a position to judge the service quality *ex ante* or even *ex post*. This market failure increases the need for a well-designed contract.

As government has a fundamental interest in the *quality* as well as the *quantity* of health services delivered, the health sector presents an archetypal “multitask agency problem” (Holmstrom and Milgrom 1991): hospital managers are expected to meet or exceed suitable service standards while simultaneously controlling costs and responding to demands that are difficult to predict, let alone control. This exacerbates the problem of incomplete contracts; and effective performance will depend even more on discretion of the front-line managers and service providers over whom the principal (the government) has only limited control.

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<sup>69</sup> The prominent role of firms as economic actors – despite their “low powered” internal incentives – can be understood as a practical response to mitigate the problem of information asymmetry and the difficulty of coordinating group efforts (Miller 1992).

#### Box 4.1: Performance Contracts in the Public Sector

What are some of the essential ingredients of successful contracting within the public sector, where the market forces are weak and where independent mechanisms of arbitration and dispute resolution (e.g., courts) are unavailable? According to a World Bank study (1995) on “contracting in” for state-owned enterprise management in developing countries, effective performance contracts depend on the ability of the government (as the principal in the principal-agent relationship vis-à-vis public enterprises) to (i) address the problem information asymmetry to monitor and measure the public enterprises’ efforts and performance; (ii) design mechanisms for rewards and penalties; and (iii) make a credible commitment to honor the contract.

The study found that performance contracts were common in public sectors all over the world; but effective ones – in this case those that led to improvements in public enterprises’ operational performance measured as their total factor productivity – were quite rare. In a significant number of the cases examined in the study, performance actually worsened after the introduction of performance contracts. Often managers of the public enterprises would manipulate their information advantages and agree on “soft” performance targets. Very few of the performance incentive mechanisms were linked to robust measures of performance (partly due to the information problem just mentioned). Many of the public enterprise managers, as political appointees, were not subjected to rigorous assessments of their performance, nor did they have the flexibility or authority to make necessary management changes. Most importantly, performance contracts between the government and public enterprises usually did not specify a neutral arbitration mechanism, and thus left the interpretation of the contracts at the discretion of the government.

Source: World Bank (1995).

In such a situation, why should a hospital manager, in the exercise of his delegated discretion through corporatization, be expected to behave in ways consistent with the preferences of the principal? From an economist’s point-of-view an efficient solution is to confer upon the agent (in this case the hospital manager) the rights of a “residual claimant.” In short, the manager is granted the rights to the surplus (or part of it), so that he has a strong incentive to monitor the activities of his staff to eliminate shirking and ensure efficient services.<sup>70</sup> A number of corporatization reforms have included provisions that give managers (and occasionally staff) a material interest in residual resources. Clearly, a prospective payment contract provides a powerful incentive to reduce costs if a significant share of any savings can be retained by managers as the residual claimant.<sup>71</sup> This is the case with São Paulo’s OSS hospitals in that they are permitted to retain a surplus budget and carry it over into the following financial year. However, this does not create strong individual incentives for hospital directors or staff since they are not allowed to retain this surplus for themselves (e.g., performance bonus), as sometimes occurs in the private sector. In both traditional and OSS hospitals managers are paid a fixed salary without bonuses for producing more or better health services for less.<sup>72</sup>

<sup>70</sup> Another way to create the same incentive is to award performance pay for managers based upon meeting annual targets, which may include cost reductions.

<sup>71</sup> Cost reimbursement schemes offer incentives to maximize the quantity of services delivered, provided the reimbursement rates are adequate. However, cost reimbursement generally does not provide an incentive to reduce costs.

<sup>72</sup> The manager of an OS *may* receive a salary that is greater than that of a typical hospital. However, there are no financial performance incentives. Managers cannot appropriate part of any surplus.

Another way to make hospitals (if not their managers as individuals) residual claimants is to let them earn revenue under market conditions rather than relying solely on a budget allocation (Harding and Preker 2003). However, this is not true of the OSS model in São Paulo. OSS hospitals are part of the national SUS healthcare system and are not allowed to charge patients for medical services. In addition, the hospitals are not directly reimbursed by the SUS for those invoices: the SUS funds go directly to the state treasury. Moreover, OSS hospitals are expressly prohibited from establishing agreements with private health plans. The OSS are entitled to raise and retain revenues from their parking facility or a café on hospital grounds; but these revenues are insignificant as a share of the overall hospital budget. Thus, OSS hospitals are wholly dependent upon agreed transfers from the state treasury.<sup>73</sup>

The arrangement in São Paulo does include “penalties,” however. As reported in Chapter 2, OSS hospitals must meet their performance targets (within a permitted range) in order to receive their contracted budget transfers. They also must submit to the SES a pre-specified set of information regarding hospital operations, which is a clever mechanism to ameliorate, if not to eliminate, the SES’ information disadvantage vis-à-vis the OSS hospitals.

São Paulo has adopted another measure to counter the problem of incomplete information. The OSS contracts in São Paulo are fine-tuned through regular dialogue between hospital directors and the OSS supervisory staff of the Secretariat of Health. Adjustments are made from one annual contract to the next, but can also be made by consensus within the operational period of a given contract. Provided that the purchaser receives sufficient information about quality, and the provider cares about renewing the contract, “relational contracts” such as these provide a framework for continual improvements (Milgrom and Roberts 1992). Selecting established NGOs – as São Paulo has done – to lead corporatized hospitals can help to support these relational contracts, as these NGOs generally care about their reputation. Regular dialogue also increases the likelihood for natural alignment of goals between government and the service provider, which reduces the risk that service quality will suffer in the face of the monitoring challenges described above.

Naturally, if an OSS fails to complete its contract, it risks losing the renewal of the concession. And for its part, the government must be careful not to lower service quality unwittingly by ratcheting downward its budget transfers to OSS hospitals when renegotiating annual performance contracts. Thus, both parties are interested in sustaining a long-term contractual relationship. What gives the São Paulo government an important advantage over many other states in Brazil is the presence of a number of NGOs that are capable of, and may be interested in, taking over management of any given hospital (i.e., the government has a viable “exit” option). This option is rarely used, but already one NGO lost its OSS contract over a dispute concerning the hospital’s performance and the adequacy of government funding.<sup>74</sup>

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<sup>73</sup> A “residual claimant” may not be needed where the number of patients to be treated and the cost of treatment are known in advance (e.g., for routine, non-emergency procedures). Then, fixed budget contracts may work well, as it may be relatively easy for the principal to monitor basic quantities such as these. The risk, though, in contracting for routine procedures and more sophisticated prospective payment contracts, is that quality may suffer or resources may go underutilized. For instance, a hospital may close wards and leave people untreated if they already have met their numerical goals under a performance contract. (This is not merely a theoretical concern. At the OSS hospital Mario Covas our interviews revealed that mammogram equipment had gone underutilized, not for lack of demand but because the hospital had already met its numerical target for mammograms under the contract.) The challenge, then, is how to expand the decision-making power of hospital managers without threatening the mission of Brazil’s Unified Health System (SUS).

<sup>74</sup> This was the case of the Hospital Geral de Itapevi run by Associação Sanatorinhos in 2005.



A key premise of the corporatization model as a solution to improve organizational performance is that managerial flexibility is granted to the manager of the corporatized organization. To meet the organization's specified performance targets, the chief executive officer needs the ability to adjust the mix of resources (inputs) in the way he deems the most appropriate. Thus *ex ante* input control is relaxed in exchange for *ex post* accountability for results. The São Paulo case study reveals that OSS managers do indeed enjoy higher levels of discretion in different dimensions of hospital management, particularly staffing. They are free to recruit professionals of their choice without following the rigid public exams (*concursos*). In extreme cases, they are also able to dismiss staff with performance problems, which is nearly impossible in direct administration hospitals. To the extent that hospitals depend for their performance on their staff's cooperative behavior with each other, it is tremendously important that directors can recruit professionals that they deem are good fit for the organization. Our study could not investigate in detail how medical professionals work together as a team inside each of the OSS hospitals, or how that relates to the hospitals' organizational performance. But, to the extent cooperative collective behavior is conducive to achieving organizational goals, the directors' ability to mold their own teams must be an essential ingredient of effective hospitals.

### **PERFORMANCE-BASED PAY IN THE PUBLIC SECTOR**

Following current management trends, a common tool for incentive alignment is to link individual employees' monetary rewards (e.g., salaries, bonuses) to measures of performance. Performance-based pay was not utilized in OSS hospitals in São Paulo. However, the Municipality of Curitiba provides an interesting case in this regard.

#### **International Experience to Date**

Since the beginning of the so-called New Public Management (NPM) reforms in the 1980s, a number of countries have introduced variants of performance-related pay (PRP) in their public sectors. PRP schemes typically aim to achieve one or more of the following objectives:

- Foster individual motivation by appealing to employees' pecuniary incentives;
- Improve the attractiveness of the pay package, especially at managerial level, vis-à-vis the private sector;
- Contain the overall wage bill by de-linking salary increases from automatic career progression with seniority;
- Compensate for the loss of job security in those countries where tenured civil service systems are abolished;
- Counter the public perception that public servants are overpaid and unaccountable (OECD 2005).

Introducing performance-related pay may help to overcome the problem of goal incompatibility in principal-agent relations. An organization needs its employees to be motivated to pursue the organization's corporate objectives, but individual employees are driven by a variety of motives, including many that may not be compatible with the organization's goals. A simple example of how a PRP scheme can align the incentives of the individual with the interests of the organization

is a sales commission.<sup>75</sup> However, for many professions, technical challenges in designing an effective pay for performance scheme are daunting. It is often difficult or impossible to measure employees' effort and performance accurately. This problem is particularly well-known in the public sector, where employees' outputs are not always tangible or easily measurable. (See Table 4.1 and Wilson 1989.)

**Table 4.1: Four Types of Public Organization**

<i>Type of organization</i>	<i>Characteristics</i>	<i>Examples (US government)</i>	<i>Management practices (if permitted)</i>	<i>Risks</i>
<i>Production</i>	Managers can observe processes ("outputs") and outcomes.	Tax collection, postal service, social security (retirement claims)	Reward good performance.	The measurable drives out the unmeasurable. Non-production agencies (e.g., police) try to pose as production agencies.
<i>Procedural</i>	Managers can observe outputs, not outcomes.	Health & safety administration, armed forces in peacetime	High levels of surveillance of procedures	High surveillance can damage morale
<i>Craft</i>	Managers can observe outcomes, not outputs.	Armed forces in wartime, inspection, criminal detection, antitrust investigation, Army Corps of Engineers.	Goal-oriented management (ensure that good outcomes occur); promote professional ethos	Freedom of operatives can lead to a minority acting opportunistically
<i>Coping</i>	Managers can observe neither outputs nor outcomes.	Teaching, policing, some diplomatic activities.	Effective management is very difficult, and has to rely on <i>ad hoc</i> alarms that something has gone wrong and ensuing punishment.	An <i>ad hoc</i> alarm system can produce a sense of unfairness, hence labor relations can be difficult.

Source: Geoffrey Shepherd (2003), adapted from Wilson (1989).

Agreeing on a manageable number of performance indicators as the basis for determining staff's performance and thus their pay is a complicated task, especially in the public sector where the "bottom line" takes multiple dimensions (e.g., efficiency, client orientation, service quality, compliance with legality and due processes, etc.). Inevitably, a small subset of "what really matters" is captured as performance indicators either because these are considered truly higher objectives, or simply because it is easier to measure staff performance along these dimensions. This can lead to the oft-mentioned problem of skewed employee efforts (i.e., prioritizing those aspects of the work that are captured by the pay-linked performance indicators), including blatant manipulation of indicators and/or work methods (e.g., arresting more suspects than appropriate when police officers' pay is linked to the number of arrests as a performance indicator).

In addition, PRP schemes, especially when workers' efforts and outputs are not easily and objectively measurable, tend to generate discontent and even conflict among employees because of the sense of unfairness they may generate. A recent OECD review of performance-related pay

<sup>75</sup> See Milgrom and Roberts (1992) for a more extensive discussion of the theoretical foundation of incentive pays.

in its member countries reported that “extensive staff surveys, conducted notably in the United Kingdom and the United States, showed that despite broad support for the principle of linking pay to performance, only a small percentage of employees thought their existing performance pay schemes provided them with an incentive to work beyond job requirements and in many cases they found it divisive” (OECD 2005:5). Based on a survey of public servants’ perceptions of performance pay in selected UK public agencies, Marsden (2003) reports that while a majority of public employees (in the general civil service and NHS trust hospitals, but not in schools) consider performance pay to be a good principle, they also see performance pay as sources of jealousies, and a weak generator of incentives to perform (Table 4.2).

Finally, motivating staff to raise their effort is often insufficient for improving their performance. There are a host of other variables that intervene in the process of public service production other than staff effort. Performance improvements may be prevented by staff’s lack of capacity to carry out the job, or misspecification of the organization’s goals (see Figure 4.1).

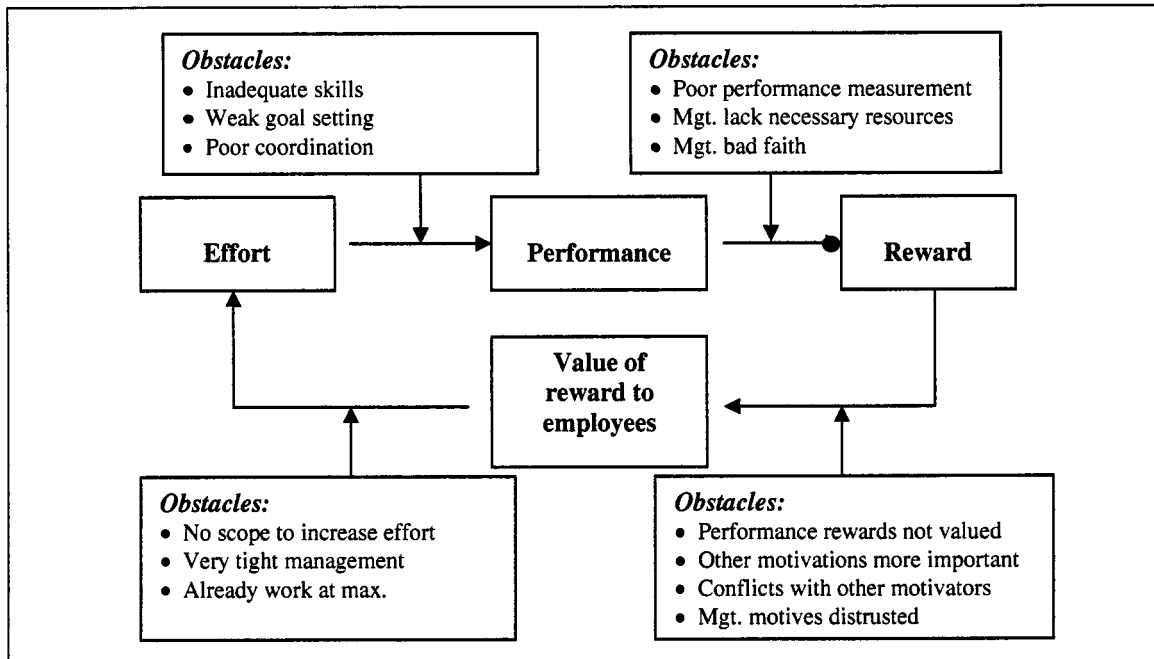
**Table 4.2: Replies to employee attitude surveys in selected public service organizations**

Question: % in each cell replying 'agree' or 'agree strongly'	Civil Service			NHS trust hospitals		Schools	
	Inland Revenue 1991	Inland Revenue 1996	Employment Service	Individual PRP trust	Group PRP trust	Primary (NAHT)	Secondary (SHA)
<b>Pay and work orientations</b> PP a good principle	57	58	72	62	52	29	42
<b>Motivation: perceived incentive</b> PP gives me an incentive to work beyond job requirements	21	18	12	32	22	8	10
PP gives me an incentive to show more initiative in my job	27	20	20	36	19	9	11
PP means good work is rewarded at last	41	19	24	47	34	38	40
<b>Motivation: perceived divisiveness</b> PP causes jealousies	62	86	78	61	51	58	70
PP makes staff less willing to assist colleagues	28	63	52	22	19	51	54
PP has made me less willing to cooperate with management	10	30	26	19	14	7	4
<b>Relations with management: non-manager replies:</b> Management use PP to reward their favourites	35	57	41	41	27	Na	Na
There is a quota on good assessments*	74	78	74	57	36	48	45
<b>Line manager views:</b> PP has reduced staff willingness to cooperate with management	20	45	39	30	27	Na	Na
PP has increased the quantity of work done	22	42	28	52	34	Na	Na
N (total replies)	2,420	1,180	290	680	900	1,050	860
Response rate (%)	61	30	33	28	21	51	21

Note: based on five-point Likert scales: 'strongly disagree', 'disagree', 'no view', 'agree' and 'agree strongly'. NAHT: National Association of Head Teachers (mainly primary schools); SHA: Secondary Heads Association (mainly secondary schools).

Source: Reproduced in Marsden (2003)

**Figure 4.1: Outline of the “Expectancy” Framework**



Source: Marsden (2003)

### **Pay for Performance in Curitiba: Not a Magic Bullet**

The perception of fairness is critical for successful application of performance pay. Perhaps because of the long history (and often continued practice) of patronage in Brazil’s public sector, Brazil’s public servants appear to even less convinced than their OECD counterparts that a PRP scheme will generate higher staff motivation and better organizational performance, even when they accept the basic principle of performance pay (Vaitsman 2001). Various forms of pay-for-performance have been implemented in the Brazil’s public administration. In most cases, however, these are PRP schemes in name only. Based on *pro forma* performance evaluations, they often are nothing more than a disguised form of salary top-up conferred to virtually everyone within the organization. This was precisely what we found in São Paulo’s direct administration hospitals, as well as in some of Curitiba’s previous bonus schemes.

Brazil’s public sector suffers from another structural characteristic that complicates the effective use of incentive mechanisms: the common practice of multiple job-holding by healthcare professionals. By holding multiple jobs, an individual spreads his work-related risks across different jobs. This risk diversification is likely to dilute effects of any single mechanism applied in a given job. For example, many job seekers in the public sector are motivated by stability, which in Brazil is largely guaranteed if one enters the public service as an *estatutário*. Highly-trained medical professionals also seek professional development and reputation among their peers. More often than not, large public hospitals where a broad range of cases are treated – including some of the most complex – become convenient laboratories for upwardly-inspired doctors to gain experience and establish their credentials. The Brazilian public sector offers

generous pension benefits as well.<sup>76</sup> Perhaps as a result of the medical professionals' successful pursuit of their corporate interests, public hospitals usually offer doctors flexible work schedules. Many doctors take advantage of this situation and hold jobs elsewhere, partly to compensate for the relatively low salaries from the public sector.

Designing an organizational incentive framework for workers who are affiliated with more than one organization and motivated by different attributes in each is a complex challenge for human resource management. What drives a particular doctor in terms of her professional development goals may not necessarily fit the public policy goals of the public hospital in which she works (e.g., she may be interested in pursuing an obscure specialization that would benefit only few patients or have limited public health impact). When someone is working for a public hospital because of the stability that the *estatutário* regime offers and is holding another job in the private sector for monetary reasons, there may be little the manager of the public hospital can do to motivate this person with performance-related pay. The same doctors, when they work in the private sector, may respond to more purely pecuniary incentives, and yet not see this employment as the primary avenue for their career development.

These difficulties raise doubts about the applicability of performance-related pay in Brazil's institutional and labor-market contexts. However, we found in Curitiba an example of a seemingly well-run performance incentive scheme. Our initial interviews with city officials prior to launching the study indicated that this scheme had a positive effect on healthcare professionals' motivations and performance. Despite the well-known difficulties of making performance pay work in the public sector, the idea that pay-for-performance was working well in Curitiba seemed plausible given Curitiba's reputation as a well-structured, high-performance public administration. Following a closer look at the data, it appears unlikely that this performance-based pay scheme should have a strong impact on employee motivation, as virtually everyone in the system receives the performance bonus. Yet, paradoxically, an overwhelming majority of the health sector staff in Curitiba opines that the latest incentive pay mechanism, IDQ, has a positive effect on their performance.

To make sense of this apparent paradox, we have offered a nuanced interpretation of how multiple instruments have played a role in fomenting and sustaining a performance culture in Curitiba, even within the (generally inhospitable) institutional environment of the Brazilian public sector. Our findings point to the central importance of the performance review process as a participatory forum in which managers and staff jointly assess units' performance, identify possible problems and seek solutions. Similar to the regular reviews of performance contracts in São Paulo's OSS hospitals, these processes provide an opportunity for health sector authorities to identify potential performance problems, further align objectives between the authorities and the front-line providers in the regional units, and build shared ownership of both the problems and the solutions.

Other managerial instruments play important complementary roles to this performance management process centered on the regular performance reviews. Citizen feedback is regularly sought and used directly in the performance-evaluation process. A well-crafted management information system provides vital infrastructure without which robust monitoring and measurement of performance indicators (the core of the whole process) could not be sustained. Standardization of medical treatments (through the protocols) and their recording in the

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<sup>76</sup> The pension reform in 2003 has made the public sector retirement benefits less generous, but these new benefits apply only to those who have entered the public sector after the enactment of the reform, and thus do not cover the majority of the active-duty public servants.

management information system significantly reduce the costs of monitoring the behavior (i.e., performance) of front-line service providers.

This observation that pay-for-performance is not by itself a magic bullet but can have positive effects on performance as part of an array of performance-oriented managerial instruments is consistent with the lessons drawn from the experiences of OECD countries that have attempted PRP schemes over the last two decades. While the limitations of pay-for-performance are widely acknowledged, at least when applied in the public sector, the OECD review also recognizes that introducing PRP schemes can be “a window of opportunity for wider management and organizational change” (OECD 2005:6).

PRP gives managers an added incentive to manage effectively and stimulates them to fully endorse a goal-setting approach. Goal-setting and appraisal provide the motivation for the kind of one-to-one contact between employees and their line managers in which the manner of working can be discussed and explained. Goal-setting works well when accompanied by more interaction between manager and staff member so that any reduction of formal controls is substituted by informal control. Another level at which the performance appraisal element of PRP has emerged as critical lies in the scope it offers to link broader organizational objectives to those of individual employees (OECD 2005:6).

Curitiba’s experience also offers interesting insights concerning how to promote a team-based performance culture. OECD experience appears to indicate that pay-for-performance, at least in the public sector, is more successful when it is team-, rather than individual-based. Team-based incentives may produce positive results to the extent that these generate better intra-team cooperation. But this can come at the expense of inter-team cooperation, as Curitiba’s experience with the team-based PIQ showed. That intra-organizational cooperation is essential seems obvious; but how to elicit this is less so. Simple reliance on extrinsic incentives, including team-based bonuses, does not seem to be the answer. (See Box 4.2.)

## CONCLUSIONS AND POLICY IMPLICATIONS

The two cases of public management innovations examined in this report demonstrate two divergent approaches to improved service delivery in Brazil’s public sector. In both São Paulo and Curitiba a central challenge facing policy makers is how to motivate staff and align their incentives with the government’s broader policy objectives. In other words, how can the hierarchical organization of public administration work better through non-traditional management of human resources?

São Paulo has introduced organizational innovation through contracting out hospital management to qualified NGOs in the form of “Social Organizations.” This model entails devolution of managerial responsibilities from the State Secretariat of Health (SES) to each OSS manager. It is a model that circumvents the well-known constraints of the RJU system. Curitiba, in contrast, has managed to strengthen performance of its primary-healthcare system within the existing human resource regime.

#### **Box 4.2: Have Team Incentives Worked in Curitiba? Some Speculation**

Primary healthcare in Curitiba, particularly in PSF Units, depends on teams – small groups of people with complementary skills and committed to a common purpose, set of performance goals, and approach for which they hold themselves mutually accountable. To what extent have team incentives been tried and worked? Two very different schemes have been attempted in Curitiba, and they contain valuable lessons for what gets people to work together.

The first incentive (PIQ, 1995-97) was an extrinsic incentive explicitly focused on team performance. It enabled the staff of the best-performing 10 percent of all Basic Units to win a 30 percent bonus. PIQ was judged to have failed because the scramble to secure a high score generated a “checklist mentality” among Units. The relatively large size of the award created a strong incentive for teams to win, but the PIQ also contained an opportunity to “cheat” because indicators were poorly measured – a sure recipe for resentment among the losers. The PIQ thus undermined the unity of the SMS.

The IDQ (since 2000) is, on the face of it, an extrinsic incentive to individuals. But there is a strong reason for teams to ensure that individual members perform well because 50 percent of the evaluation of the individual is based upon the teams’ performance (35 percent on performance under the management contract, 15 percent on the community’s evaluation of performance). Since very few people fail to qualify for the bonus (1 to 2 percent) we do not believe that the IDQ provides a strong extrinsic incentive to promote individual effort (beyond avoiding lateness and absences). By the same token, the IDQ should provide little incentive for team members to ensure that individual members perform well. Yet our survey results indicate that passing the IDQ test is a major preoccupation of teams; and for that reason they devote increased attention to solving problems that arise with individual team members.

Thus, in contrast to the PIQ, staff attest that the IDQ functions as an effective team-based incentive scheme. There is something of a puzzle here. It may be that the incentive is largely intrinsic: the satisfaction of passing the test of the management contract and community evaluation. Unlike the PIQ, however, the apparent team incentive related to the IDQ does not involve rivalry with other Units because it does not function as a zero-sum game. Rewards are more modest. And the scheme is also based on more trustworthy information. Each of these features contributes to a greater perception of fairness on the part of employees. The IDQ experience also suggests that what most clearly drives team performance at the moment in Curitiba are the intrinsic incentives and attitudes of trust and cooperation that follow from the culture of the health sector and the culture of problem-solving (strategic planning) in Curitiba.

#### **Clarity and Consistency of Purposes: Institutional and Informational Foundations**

In spite of the divergent approaches adopted in these two cases, there are several characteristics they share in common. One is the relative clarity of purpose imposed on both São Paulo’s OSS hospitals and Curitiba’s regional primary care units through performance contracts with the central authorities (i.e., state and municipal secretariats of health). Clear specification of performance goals is a necessary foundation for any performance management. Direct administration hospitals operate without explicit performance goals. Interestingly, both in São Paulo and in Curitiba, the performance of healthcare organizations is reviewed on a regular basis. These regular sessions serve to fine-tune the content of the management contracts as well as



regularly monitor unit performance. In that way the units' performance goals are better-aligned with both the health secretariats' strategic objectives and the units' abilities to deliver on those targets. As an added benefit, regular reviews of goals and actual performance attenuate the information asymmetry between the principal and the agent, a fundamental challenge of any performance management system.

Explicit specification of performance targets and meaningful monitoring are only possible with robust information systems. Both São Paulo and Curitiba have benefited from investments in this area. In the case of Curitiba, development of standardized treatment protocols has contributed to reducing the cost of monitoring regional units' performance. Standardization of service delivery procedures, where possible and desirable, can ease the costs of monitoring the performance of front-line service providers, and is therefore an appealing option to consider.

A clear policy implication of these two case studies is that governments should invest in establishing explicit performance goals, whatever those may be, in order to form shared expectations between the policy maker (e.g., education secretariat) and service providers (e.g., schools). Of course, what really counts is substance rather than form. Performance goals must be clear, relevant, and readily monitorable. And they must represent a shared commitment between the principal and the agent. The regular reviews and revisions of performance goals practiced by both São Paulo's OSS hospitals and Curitiba's primary healthcare system is a good practice of "relational contracts" that other jurisdictions would do well to emulate.

### **Managerial Flexibility or Organizational Development?**

Once performance targets are clearly set and an arrangement for regular monitoring and measurement of performance is in place, managers still must "manage" inputs in order to produce targeted outputs (and outcomes). Here, the two cases present somewhat nuanced pictures of what matters most in managerial flexibility. The São Paulo case, in particular, points to hospital directors' ability to recruit staff of their own choosing as an important element of fomenting intra-organizational cooperation. It is our hypothesis, having discarded a number of alternative explanations, that in directly recruiting staff, hospital directors select those individuals that they deem best-suited to the culture of the organization and to mutual cooperation toward achieving the service goals of the organization.

The Curitiba story places less emphasis on formal managerial flexibility, since the model has developed within the framework of tenured *estatutários*. The expansion of the sector (and some staff attrition) may have allowed the Health Secretariat a degree of flexibility through increased recruitment. However, the essence of the Curitiba "model" is not one of flexible labor relations where public servants are subjected to the forces of labor market discipline. Here, what seems to matter most is the staff's *esprit de corps*, a consequence, it appears, of their belonging to the network of self-identified professionals, reinforced by clearly defined policy goals, a performance-oriented cultural legacy, and processes – such as the IDQ – that together reinforce knowledge-sharing and teamwork to further a common policy vision.

In short, mechanistic applications of extrinsic incentives have not been the main drivers of performance improvements in São Paulo or Curitiba. Rather, both cases highlight the role of organizations as organic environments within which managers and staff must find common goals (through carefully devised organizational structures and management processes) and seek ways to cooperate with each other through an admixture of diverse managerial and information tools. Our conclusions are similar to Miller (1992:237-238) in his assessment of how inherent "managerial

dilemmas” between individual employees’ self-interests and the corporate interests of the principal may (sometimes) be reconciled:

It is to be expected that hierarchies only rarely and briefly achieve anything that may be regarded as a full resolution of the problems of information asymmetry, team production externalities, and market power. Rather, hierarchies are political settings in which people continually struggle to achieve the potential made possible by specialization and cooperation. They do so as purposive, rational actors who are aware that it is their own conflicting self-interest that is the primary obstacle to the achievement of their shared goals. The tools for dealing with this dilemma are the classic political tools: the enforcement of social norms, political leadership, and the credible constraint of hierarchical authority.

## **Lessons**

What do these findings hold for other sub-national jurisdictions in Brazil? Of the success stories, which elements are transferable to other contexts? As we have already noted, there is no single magic bullet to improve the quality of public services. The details of an appropriate reform measure and its application depend considerably on local contexts. Thus, while OSS hospitals have worked well in São Paulo, the model may be unsuitable for many states and municipalities, particularly those with few health-sector NGOs that have a demonstrated commitment and experience in delivering healthcare services. The capacity of state/municipal secretariats to design and enforce performance contracts is crucial, as well. But that capacity can be learned and fostered. Finding reputable NGOs to partner with the government to improve services may be the bigger challenge.

Performance-related pay is another popular concept in Brazil that purports to leverage service delivery improvements. However, international evidence and our Curitiba case study strongly suggest that PRP alone is a troublesome tool to align incentives between principal and agent. (In fact, it can often be counterproductive.) The Curitiba case does suggest that if PRP is used in concert with other tools it can facilitate the process of jointly identifying problems, agreeing clear goals, and enhancing performance, even if the monetary incentive effect is difficult to sustain over time.

Given that a performance-oriented culture does not emerge spontaneously, reformers should be encouraged to consider adopting (and adapting) the tools that were applied to good effect in São Paulo (Social Organizations with clear specifications of performance expectations and rewards and sanctions for performance) or Curitiba (systematic performance reviews based on agreed, monitorable, team-based indicators, with modest performance-related pay playing a supplementary role).

The appeal and suitability of specific tools will be determined by the “push” and “pull” factors present in a given setting. “Push” factors are those that propel management reform in a given direction. Meanwhile, “pull” factors are pre-existing characteristics or competencies without which a given solution is likely to founder. As an illustration, Table 4.3 presents the primary “push” and “pull” factors identified in our São Paulo and Curitiba case studies. Policy makers should be aware that no single instrument in isolation is likely to bear fruit. Moreover, São Paulo and Curitiba already possessed two of Brazil’s most sophisticated governments before they launched the managerial reforms described here. Where enabling conditions are less favorable than in São Paulo or Curitiba, then modest steps and a degree of caution should infuse any reform

strategy. A steady, strategic, experimental approach is best to turn around an organization’s performance orientation.

**Table 4.3: Local “Push” and “Pull” Factors in the Choice of Healthcare Performance Management Strategies**

	<b>“Push” Factors [stimulate change in a certain direction]</b>	<b>“Pull” Factors [support the “good fit” of a given solution]</b>
<b>Sao Paulo [contracting model]</b>	<ul style="list-style-type: none"> <li>• Dissatisfaction with service quality</li> <li>• Human resources wage bill constraint (LRF limits)</li> </ul>	<ul style="list-style-type: none"> <li>• Vibrant NGO presence in health sector; many potential actors with experience and ability to compete to administer “public” hospitals as Social Organizations</li> </ul>
<b>Curitiba [direct administration management with strategic planning and performance reviews]</b>	<ul style="list-style-type: none"> <li>• <i>Sanitaristas</i> pursuing a particular preventive care model</li> <li>• Unintended consequences of earlier performance-related-pay scheme</li> </ul>	<ul style="list-style-type: none"> <li>• Cultural tradition of strategic planning and problem-solving</li> </ul>

### Policy Implications

Beyond the general observations above, our case studies do not provide a straightforward blueprint for other sub-national governments in Brazil to follow. Still, there are some broadly common strategic tools (which can be applied at different levels of sophistication); and there are choices to be made about the incentive systems that govern staff and management behavior.

The case studies explore two types of management tools: i) those that aim to align the expectations of principal and agent and mitigate information asymmetry, and ii) those that provide direct incentives to tie an employee’s or manager’s behavior to performance outputs. The two types are not intrinsically incompatible; but knowing how to combine these instruments is more an art than a science.

**Instruments for aligning expectations and reducing information asymmetry between principal and agent:** There are a number of techniques that reform-minded governments can employ to better align expectations and incentives between principals and agents. Indeed, our two studies suggest a common list of “good things” to do:

- Invest in strategic planning by clarifying expectations and establishing regular feedback on performance. These processes work better when operators – the front-line troops – are involved in the planning-and-evaluation cycle.
- Invest in better strategic management of information by standardizing processes and definitions; ensuring the quality of data; tapping information from the community; and providing IT systems to manage this information.

**Choosing among instruments for direct performance incentives to agents:** The instruments that create clearer, direct performance incentives for staff and managers are generally difficult to apply because they entail complicated policy tradeoffs (including a higher political profile). Our two cases suggest that extrinsic personnel incentives are more compatible with the use of external

labor markets, while intrinsic incentives may be more compatible with internal labor markets (e.g., the RJU, where entry and exit are limited).

- The OSSs in São Paulo rely primarily on extrinsic incentives: the freedom and incentives to manage for managers, and the discipline of external labor markets for staff.
- The SMS in Curitiba places greater emphasis on intrinsic motivations for staff (investing in *esprit de corps*, using staff appraisals to identify and solve problems) and maintains a more hierarchical management format.
- Neither system has so far relied heavily on bonus schemes. (OSS hospitals have not yet tried them, and Curitiba has yet to get far with them.)

Of the two management tool types, steps to better align expectations and reduce information asymmetry are generally less sophisticated and entail fewer risks of “unintended consequences” than direct performance incentive strategies. Thus, the majority of sub-national jurisdictions in Brazil – which lack the installed administrative capability of São Paulo and Curitiba – may find it necessary to focus first on basic statistics and management information, as well as minimum administrative capacities (e.g., simple planning, logistics management). The government must have a clear policy objective that can be translated into meaningful performance targets/expectations at the sectoral/operational level. In the beginning, when the government’s experience with designing proper performance indicators is limited and its capacity for information management is weak, it is preferable to focus on a limited set of performance indicators: far better to have a few indicators that can be reliably tracked and serve as references for the government and service providers in their regular performance review discussions than to propose myriad indicators without the ability to track them on a timely and reliable basis.

As our case studies demonstrate, there are gradients of sophistication in each set of tools. Consider strategic planning, for example. Clarifying expectations can be tackled at a minimum of four different levels: i) informal or formal discussions; ii) formal strategic or indicative planning; iii) relational contracting; and iv) enforceable contracts. Similarly, feedback can take place through simple discussions (informal or formal) or through a formal evaluation process. Once again, what really matters is the political commitment behind the expressed performance expectations. The choice of instruments is secondary.

Governments with limited institutional capacity are well-advised to be cautious about adopting formal contractual tools, as it will prove particularly difficult to set appropriate performance targets *ex ante*, which may result in frequent contract revisions (reducing the credibility of contracts as an enforceable tool) or its complete disregard by the actors involved.

Similarly, mechanistic applications of performance incentive tools, especially performance-related pay, should be approached with caution by governments with weak administrative capacities. The conditions under which performance-related pay can be effective are rather stringent (e.g., performance itself is reliably monitored, managerial “courage” to apply both positive and negative incentives, etc.). When such conditions are not met, PRP schemes become a formality without real impact on staff behavior, or even produce negative consequences. On the other hand, development of professionalism and *esprit de corps* is a longer-term endeavor that is not within easy reach of any particular government administration. As the federal government has done, conscious efforts to strengthen professionalism of certain “core” functions through careful recruitment strategies will pay off in the medium to long run.

Table 4.4 provides a concise depiction of the performance approaches utilized in São Paulo and Curitiba, and their effects. Other sub-national jurisdictions in Brazil can learn from these experiences, but must be careful to choose techniques within the reach of their capabilities.

<b>Nature of incentive instruments</b>	<b>Aligning incentives (reducing information asymmetries)</b>	<b>Rewarding performance</b>
<b><i>Strategic planning</i></b>		
<i>Clarifying expectations</i>	CU: goal clarification through "relational contracts." SP: goal clarification through relational and enforceable contracts.	
<i>Feedback on goals attainment</i>	CU: problem solving culture: detecting problems and problem-solving through contract discussions. SP: problem detection and solving through contract discussions; accountability (contract fulfillment).	
<i>Making complex systems work</i>	CU: investment in a combination of systems, leading to better processes and information.	
<b><i>Instruments for strategic management</i></b>		
<i>Information system</i>	CU: good information systems contribute to goal clarification. SP: good information systems contribute to goal clarification.	
<i>Standardization</i>	CU: explicit standardization measures aid clarity of information and goal-setting.	
<i>Information from community</i>	CU: community information reveals problems.	
<b><i>Instruments for inducing personnel to perform</i></b>		
<i>Staff evaluation</i>	CU: personnel evaluation an aid to detecting problems and problem-solving.	
<i>Extrinsic incentives: differential remuneration</i>		CU: not very strong results from bonus systems so far, but potential for small-team collaboration incentives
<i>Extrinsic incentives: freedom to hire and fire</i>		SP: freedom to hire (used more than freedom to fire).
<i>Intrinsic incentives</i>		CU: investment in job satisfaction – esprit de corps (some tension with extrinsic incentives).
<b><i>Other instruments</i></b>		
<i>Appropriation of surplus</i>		SP: OSSs can retain savings.
<i>Enforceable contract</i>		SP: poorly performing OSSs lose franchise.
<i>Freedom to use resources</i>		SP: OSSs can optimize resource use and retain savings.

CU: Curitiba primary care  
SP: São Paulo OSS hospitals



### APPENDIX A. Hospitals in São Paulo Research Sample<sup>†</sup>

The study sample includes seven traditional state hospitals, seven OSS, four private hospitals, and two public hospitals supported by foundations. At each of the hospitals visited, small focus group interviews were conducted with doctors and nurses – outside the presence of their managers – to gather their observations about the hospitals where they work, and explore the reasons for their employment choices. The questionnaire and core focus group questions are presented in Appendix B.

Hospital Characteristics	Type	No.
Legal Status	Direct administration	07
	Public (with Foundation)	02
	OSS	07
	Private	04
Type of Services	Secondary/tertiary	18
	Tertiary	01
	“Quaternário”	01
Size (by no. of beds)	Small < 100	02
	Medium 101 – 200	06
	Large 201 – 400	11
	Extra-large > 400	01
Year of inauguration	Public (with Foundation) 1888–1980	02
	Direct administration 1948–1998	07
	Private 1965–2004	04
	OSS 1998–2003	07

Source: Research questionnaire – “Características dos Hospitais.”

<sup>†</sup> Note: In addition to these 20 hospitals where a uniform instrument was applied, valuable information was also obtained during preliminary visits and interviews at the following hospitals:

- Brigadeiro (direct administration)
- Vila Penteadó (direct administration)
- Mario Covas (OSS)
- Carapicuíba (OSS)
- Sumaré (foundation/university)





## APPENDIX B. Research Questionnaires Applied in São Paulo Hospitals

### I – DADOS DA INSTITUIÇÃO

Nome: \_\_\_\_\_  
Endereço: \_\_\_\_\_ CEP: \_\_\_\_\_  
FAX: \_\_\_\_\_ e-mail \_\_\_\_\_

Natureza jurídica da Instituição:

Público ( ) Privado ( )

Característica da Instituição:

Administração Direta ( )  
Autarquia ( )  
Fundação ( )  
OSS ( )  
Outras ( ) Quais? \_\_\_\_\_

Data de início das atividades \_\_\_\_/\_\_\_\_/\_\_\_\_

Nome do Diretor Geral

Formação / Perfil

- Possui Curso de Administração Hospitalar ou Equivalente?
- Há quanto tempo exerce o cargo de diretor?
- Como foi feita a sua indicação para diretor?
- Existe algum instrumento ou mecanismo que avalie seu desempenho no hospital? Qual?
  
- Você considera 2004 um ano de êxito para o Hospital? Por quê?
- Quais foram as principais metas adotadas? E como foram selecionadas?
- E para 2005 quais as metas que você pretende atingir?

### II – PERFIL DO HOSPITAL

Porte do hospital em relação ao nº de leitos instalados:

Pequeno até 49 leitos ( )  
Médio 50 – 149 leitos ( )  
Grande 150 – 500 leitos ( )  
Extra-grande, acima de 500 leitos ( )

Complexidade do Hospital no Sistema de Saúde \_\_\_\_\_

Tipo do Hospital:

Geral ( )  
Especialidades ( ) Quais? \_\_\_\_\_

Taxa de ocupação (%):

Taxa de permanência (%):

Número de Leitos Operacionais:

Número de Leitos por Especialidade:

Número de funcionários por leito:

Dados da Produção do Hospital (Exercício 2004):

Número de consultas ambulatoriais:

Número de consultas emergenciais:

Número de Exames (SADT):

Número de Internações:

Número de Cirurgias:

### III – INFORMAÇÃO ACESSO E CONTROLE

- Existe um banco de dados no hospital com informações sobre pessoal?
- Quem administra esse banco de dados?
- Com que frequência é atualizado?
- Como é feita a coleta de informações?
- Que tipo de informações consta desse banco de dados?
- De que forma a Direção do Hospital se utiliza desses dados e que decisões são tomadas em relação aos mesmos?

### IV – CONTROLE DE PAGAMENTO

- Qual a fonte de recursos para o pagamento de pessoal?
- Há diversas fontes de recursos para o pagamento de pessoal?
- Alguma vez houve dificuldades financeiras para pagar o pessoal? E que medidas foram tomadas?
- Quando há cortes orçamentários o diretor tem autoridade para decidir onde cortar?
- Há alguma espécie de orçamento participativo?

### V – POLÍTICA DE RECURSOS HUMANOS

- Existe a área de recursos humanos:  
SIM ( ) NÃO ( )

[Anexar o organograma]

- Quais as formas de contratação de pessoal?  
Estatutário ( )  
Emergência (733,3131) ( )  
Temporário (Lei 500) ( )  
CLT ( )  
Cooperativa ( )  
Terceirização ( ) em que área: \_\_\_\_\_  
Prestação de services ( )
- Quais serviços são contratados pelo hospital?  
Limpeza ( )  
Segurança ( )  
Alimentação ( )  
Lavanderia ( )  
Outros ( )
- A contratação para um ou mais serviços acima descritos é recente (nos últimos 3 anos)?  
SIM ( ) NÃO ( )

Taxa de absentismo (%):

Taxa de rotatividade (%):

Números de Ações Trabalhista (Exercício de 2004):

Tipos de Ações Trabalhista:

- Qual a contribuição dos serviços abaixo relacionados para o bom desempenho do hospital, pontue de um a dez:
  - Recursos Humanos ( )
  - Recursos Materiais ( )
  - Recursos Financieros ( )
- Existem atividades ou ações que ajudem a fortalecer o compromisso dos funcionários com as metas do hospital?
- Quais os principais obstáculos com relação ao Recursos Humanos e que procedimento você adota para removê-los?

## VI – RECRUTAMENTO E SELEÇÃO

- Quais as formas de recrutamento utilizadas pela Instituição?
  - Recrutamento interno ( )
  - Recrutamento externo:
    - Jornais ( )
    - Diário Oficial ( )
    - Outros ( ) Quais?
- Quais as formas de seleção de pessoal utilizadas pela Instituição?
  - Concurso público ( )
  - Prova prática ( )
  - Entrevista ( )
    - Dinâmica ( )
    - Teste Psicológico ( )
    - Análise de Currículo ( )
    - Seleção ( )
    - Outros ( ) Quais?
- O processo seletivo é executado pela:
  - Própria instituição ( )
  - Empresa contratada ( )
  - Outras ( ) Quais?
- Qual a duração que existe entre o processo de seleção até o profissional começar a trabalhar?
  - 3 dias ( )
  - 1 semana ( )
  - 1 mês ( )
  - 2 meses ( )
  - 6 meses ( )
  - + 6 meses ( )
  - Outros ( )

- Os resultados sobre a seleção variam muito de acordo com a forma legal de contratação (Estatutário, Emergência (733,3131), Temporário (lei 500), CLT, Cooperativa, Terceirização)?
- Quais são as vantagens e desvantagens destes regimes do ponto de vista do diretor?

## VII – CONTRATAÇÃO

- Quem toma decisões sobre a contratação de funcionários?
- O que o hospital faz quando há necessidade de contratar funcionários? A quem se refere:
  - Secretário da Saúde ( )
  - Cooperativas ( )
  - Contratos temporários ( )
  - Outros ( ) Quais? \_\_\_\_\_
- Você tem autonomia para contratar um determinado médico que julgue competente?
- Qual a especialidade mais difícil de contratar?
- Recrutamento dessa especialidade é realizado de forma diferente?
- O hospital tem autonomia para demitir funcionários? Qual o procedimento?
- Quais os fatores que levam a demissões de funcionários?
- Há outras maneiras de punir funcionários por mal desempenho?
- Há interferência de sindicatos/cooperativas quando há demissões? Quais são?
- Qual o número de profissionais treinados e capacitados no exercício de 2004? Indicar o número de profissionais treinados e capacitados por categoria e carga horária (Anexo II)

## VIII – PLANEJAMENTO DE RECURSOS HUMANOS

- A instituição possui plano, cargos e salários?  
SIM ( ) NÃO ( )
- Realiza pesquisa de mercado para manter o equilíbrio salarial interno?  
SIM ( ) NÃO ( )
- Quais os benefícios praticados pela Instituição (vale refeição, vale transporte, cesta básica, plano de saúde, plano odontológico, bolsa de estudos, outros)?

## XIX – AVALIAÇÃO DE DESEMPENHO

- Existe instrumento de avaliação do desempenho do profissional:  
SIM ( ) NÃO ( )  
Em caso positivo, especificar a periodicidade e os critérios de avaliação.
- Existe premiação por produtividade?  
SIM ( ) NÃO ( )  
Em caso positivo, quais os critérios?  
E quais prêmios?
- O resultado da avaliação de desempenho subsidia:
  - Dispensa do profissional ( )
  - Readaptação do profissional ( )
  - Treinamento e capacitação ( )
  - Promoção ( )
  - Revisão dos critérios de seleção ( )
  - Outros ( ) Quais? \_\_\_\_\_
- Existe plano de carreira na instituição?  
SIM ( ) NÃO ( )

## X – CONTROLE / DISCIPLINAS

- Qual o procedimento informal adotado pelo Diretor ao profissional (médico / enfermeiro) pelo não cumprimento da carga horária ou atraso no plantão?
- Qual a atitude / ação do diretor quando o profissional (médico / enfermeiro), se nega a participar ou colaborar para o desenvolvimento das atividades?
- Nos últimos 3 anos houve algum processo decorrente de erro médico e qual a atuação do CREMESP?
- Nos últimos 3 anos houve algum processo decorrente de erro médico e qual a atuação do COREN?
- Quais procedimentos são mais eficazes para disciplinar os funcionários?

## XI – CONTROLE DE PAGAMENTO

- Como são definidos os salários dos profissionais do hospital?
- Existe flexibilidade de pagar os profissionais com base em seu desempenho?
- Existe competição e conflito entre os profissionais? Que procedimento é tomado pela direção do Hospital?

## XII – CONTROLE EXTERNO

- Existe controle que fiscaliza a execução orçamentária / folha de pagamento / gestão de pessoal / qualidade de serviço? Se sim, como é a relação com a direção do hospital?
  - Os funcionários fazem parte do órgão?
  - As decisões desses órgãos tem impacto direto na gestão das atividades do hospital?
  - Quando os clientes tem queixas com relação aos serviços oferecidos a quem se reportam?
  - As queixas feitas são levadas em consideração e que providências são tomadas?
  - Há uma ouvidoria no hospital? E a quem esta se reporta para a discussão dos problemas?
  - Os problemas em geral são resolvidos de que forma?
-

Quantificação dos Recursos Humanos [referência dezembro 2004]

CATEGORIAS PROFISSIONAIS	NÚMERO DE PROFISSIONAIS		
	PRÓPRIOS	TERCEIROS	TOTAL
1. Nível Universitário			
Administrador Empresa			
Analista de Sistema			
Ass. Social			
Biologista			
Biomédico			
Bioquímico			
Enfermeiro			
Engenheiro			
Farmacêutico			
Fisioterapeuta			
Médico			
Nutricionista			
Programador			
Psicólogo			
Terapeuta Ocupacional			
Outros Nível Universitário (*)			
Sub-Total Nível Universitário			
2. Nível Médio			
Aux. Enfermagem			
Aux. Serviço			
Escriturário			
Secretárias			
Téc. Enfermagem			
Téc. Laboratório			
Téc. Radiologista			
Outros Nível Médio ( * )			
Sub-total Nível Médio			
3. Nível Básico			
Manutenção			
Motorista			
Vigia			
Outros Nível Básico ( * )			
Sub-Total Nível Básico			
TOTAL			

OBS: Acrescente linhas, se necessário

**TREINAMENTO E DESENVOLVIMENTO  
(EXERCÍCIO DE 2004)**

**NÍVEL UNIVERSITÁRIO**

Nome do Curso/Treinamento: \_\_\_\_\_

Carga horária: \_\_\_\_\_

Número de Profissionais Treinados: \_\_\_\_\_

Instituição certificadora \_\_\_\_\_

**NÍVEL MÉDIO**

Nome do Curso/Treinamento: \_\_\_\_\_

Carga horária: \_\_\_\_\_

Número de profissionais: \_\_\_\_\_

Instituição certificadora \_\_\_\_\_

**NÍVEL BÁSICO**

Nome do Curso/Treinamento: \_\_\_\_\_

Carga Horária: \_\_\_\_\_

Número de Profissionais: \_\_\_\_\_

OBS: Acrescentar linhas para cada curso/treinamento realizado





## APPENDIX C. Focus Group Interviews in São Paulo Hospitals

### PESQUISA QUALITATIVA DE GRUPO FOCAL

Pesquisa de grupo focal, com médicos e enfermeiros das instituições hospitalares

Questões:

- Existe política de formação e capacitação na instituição onde trabalha?  
Dentre as ações de formação e capacitação, você destacaria alguma que valoriza o profissional e que priorize a melhoria da qualidade dos serviços prestados?  
Quem coordena as ações de formação e capacitação na instituição?  
Destaque as ações de formação e capacitação voltadas a informação e orientação para a população quanto aos serviços ofertados?  
Quais as instituições formadoras parceiras do processo de capacitação de sua instituição?  
Existe investimento para o desenvolvimento de pesquisa e ensino?  
Quando existe treinamento / formação a solicitação é feita por parte dos profissionais ou é uma imposição da Diretoria?  
Existe uma determinada frequência para realização desses treinamentos?  
Como você identifica o cumprimento da legislação de pessoal em sua instituição?  
Como são realizadas as contratações de pessoal e quais os critérios de seleção?  
Como são realizadas as demissões na sua instituição?  
Como se dá o cumprimento da carga horária dos profissionais que trabalham na sua instituição?  
Quais as medidas disciplinares adotadas por sua instituição? Quais as medidas para estimular a cooperação com as metas do hospital?  
A instituição adota mecanismo de incentivo a produtividade/bom desempenho?  
Caso positivo, quais os critérios de mensuração?  
Quais os mecanismos de promoção e evolução funcional usualmente adotado por sua instituição?  
Existe Plano de Carreira na sua Instituição?  
Há possibilidade de ascensão profissional para você nesta instituição?  
Quantos vínculos empregatícios você tem. Quais são?  
Qual a vantagem e desvantagem em trabalhar no setor Público?  
Qual a vantagem e desvantagem em trabalhar numa OSS? E num hospital de administração direta?  
Qual a vantagem de trabalhar no setor Privado?  
Quais os fatores que motivam o profissional médico para que tenham múltiplos empregos (classifique de 1 a 10 de acordo com suas prioridades)
- |   |      |
|---|------|
| - aprendizado/manter-se atualizado na sua especialidade | ( )  |
| - salário   | ( )  |
| - estabilidade  | ( )  |
| - prestígio institucional                               | ( )  |
| - ligações acadêmicas (residência, mestrado, professor) | ( )  |
| - outros  | ( )  |
| Total   | (10) |

Quais os fatores que motivam seu emprego no OSS?

(classifique de 1 a 10 de acordo com suas prioridades)

- aprendizado/manter-se atualizado na sua especialidade ( )
- salário ( )
- estabilidade ( )
- flexibilidade de horário ( )
- ambiente/organização/ordem superior ( )
- prestígio institucional ( )
- perspectiva de ascensão profissional na instituição ( )
- ligações acadêmicas (residência, mestrado, professor) ( )
- outros ( )
- Total (10)

Hospital de administração direta?

(classifique de 1 a 10 de acordo com suas prioridades)

- aprendizado/manter-se atualizado na sua especialidade ( )
- salário ( )
- estabilidade ( )
- flexibilidade de horário ( )
- ambiente/organização/ordem superior ( )
- prestígio institucional ( )
- perspectiva de ascensão profissional na instituição ( )
- ligações acadêmicas (residência, mestrado, professor) ( )
- outros ( )
- Total (10)

Hospital privado?

(classifique de 1 a 10 de acordo com suas prioridades)

- aprendizado/manter-se atualizado na sua especialidade ( )
- salário ( )
- estabilidade ( )
- flexibilidade de horário ( )
- ambiente/organização/ordem superior ( )
- prestígio institucional ( )
- perspectiva de ascensão profissional na instituição ( )
- ligações acadêmicas (residência, mestrado, professor) ( )
- outros ( )
- Total (10)

## APPENDIX D. Survey Summary: Avaliação dos Incentivos aos Recursos Humanos na Atenção Primária em Saúde de Curitiba

In July-August 2005, as part of its study of the management of primary healthcare in Curitiba, the World Bank, with the help of the Secretaria Municipal de Saúde, carried out a survey of perceptions that senior staff in Health Units had about the performance incentives they face. The survey was sent, through SMS's internal mail system, to 372 eligible staff (nível superior) in a sample of Health Units. 254 responded (a satisfactory 68 percent response rate). The 31 units in the sample were chosen to give adequate representation to: all Health Districts; the distribution by type of senior staff (ASL, doctor, nurse, dentist); and the breakdown between PSF Units and Basic Units. (Emergency Units – 24 Horas – were excluded from the survey.) The survey was confidential and replies were coded, entered, and analyzed by the World Bank.

The survey questions were selected, after discussion with the SMS, on the basis of field interviews that sought to understand the management system and performance incentives overall. We also went into the study with a particular prior interest in the way that the remuneration-based incentive IDQ worked. 29 multiple-choice questions tackled the following themes.

- The uses, benefits and costs of *Management Contracts* (Termo de Compromisso de Gestão / POA) and the way these are negotiated.
- The extent to which *political influence* is exerted on management contracting and on staffing.
- The impact of the *Incentive Program for Quality Development* (IDQ salary bonus) on staff behavior and performance and on teamwork and the role in IDQ of community evaluations.
- The extent to which the above factors, as well as belonging to a PSF Unit versus a Basic Unit, contribute to teamwork and *staff motivation*.

Here is our summary of the survey results, with some commentary.

*SMS's management-contracting system is perceived to be working, and professionals have bought into this performance-oriented culture.*

- 95 percent of respondents find management contracting useful in general –for organizing work processes, identifying and solving problems, and clarifying objectives and establishing priorities (Gráficos 6-10 in the survey report).
- 85 percent found that the benefits of management contracting exceeded costs (Gráfico 11).
- 93 percent found that the information system helped identify problems (Gráfico 12). The system helped in a variety of ways relating to health information and to management: epidemiological information, faster service, team productivity, reaching targets (Tabela 1).
- 61 percent were ignorant of how other Health Units were performing (Gráfico 13). But this picture changes when different types of staff are considered: a large majority of managers (ASL) *do* know how other Health Units are performing, while it is practitioners (nurses, dentists and, in particular, doctors) who do not. Among the managers (i.e. those with most opinions), those that profess a view tend to think they are performing similarly to other units (Gráfico 14).

*Commentary:* It is the managers, not the practitioners, who regularly meet with their supervisors at the District level, so it makes sense that the managers are more aware of how other Health Units are performing. But there appeared to be a general hesitation to judge the performance of other Health Units (and a hesitation to find them better or

worse). It can be inferred from this that there is no strong sense of competition between Health Units.

- Targets are fixed between District and Unit with a mix of negotiation and imposition (Gráfico 15). But the Health District is open to re-negotiation when there are difficulties in fulfillment (Gráfico 16).
- Performance contracting is an instrument that creates links with a broad variety of other municipal-government services (Gráfico 17 and Tabela 2).

*The role of the Conselho Local de Saúde in management contracting appears to be on the modest side.*

- The involvement of the Local Health Council in management contracting is positive, but limited (Gráficos 18-21). The Council's greatest contribution is to provide information about the community and to identify problem (Tabela 3).

*The survey provides ambiguous information on external political influences.*

- Many staff consider that external political influences are substantially present in setting targets, appointment decisions, and staff assignments to units (Gráficos 23-25). Managers, doctors and dentists share something of a pattern of bi-modality: they *either* feel that political influences are strong *or* that they are absent or weak, *but* relatively few feel they are moderate. (Nurses are the group most unambiguously convinced that political influences are strong.)

*Commentary:* This is the one part of the survey where responses were not broadly in line with interview findings. This may be because the survey was confidential. Yet the replies are difficult to interpret. The questions may have proven ambiguous to respondents (if only because managers *are* political appointees and because production targets *are* political targets). The bi-modal pattern of responses raises questions about the usefulness of the responses to this question.

*IDQ is perceived to stimulate staff performance, partly because, through the staff-evaluation process, it gets teams to help solve problems of individuals.*

- There is an overwhelming view (90 percent) that IDQ had an influence on behavior when it was introduced (Gráfico 26).
- This influence was felt to be: greatest in the area of workplace behavior (discipline, punctuality, and so on) and motivation; middling for work organization and productivity; and least (but still with some impact) for improving salaries and team work (Gráficos 27-32).
- 61 percent of respondents believed that IDQ continues to provide an important influence on behavior (Gráfico 33).
- The individual evaluation process that is part of the IDQ is perceived to contribute most by promoting employee-supervisor dialogue; it contributes somewhat to training and solving team conflicts and can have effects on employees losing bonuses. It is not perceived to result in transfers to other units (Gráficos 34-36 and Tabela 4).
- Employees generally think of the individual evaluation process that is part of the IDQ as a fair instrument – transparent, impartial, and coherent (Gráficos 37-39).
- Clearly, passing the IDQ test is a major preoccupation of teams (Gráfico 40). Teams, when they perceive a problem with a staff member, will, most often, talk to that person or else adjust work processes (Tabela 5).

*Commentary.* Since the IDQ statistics (Table 7) clearly indicate that virtually the only staff to forego the bonus are those with problems of workplace behavior (mostly punctuality), it is difficult to believe that it functions as a simple performance bonus (as a sales commission does, for instance). (Note that workplace behavior is perceived to be where IDQ had its greatest impact.) Beyond this, it is a vehicle for staff evaluation and for the identification and solution of problems that relate to team performance. Sometimes, management innovations tend to have a short-lived effect (known as a Hawthorne effect) as they lose their novelty and workers adjust their behavior: the IDQ may be one such innovation. There is, indeed, a *prima facie* indication of a substantial decline in the perceived effectiveness of IDQ (Gráfico 33), though this is not completely clear.

*Community evaluations (part of the IDQ evaluation process) are useful in making services more client-oriented.*

- Teams are well aware of Community Evaluations (Avaliações da Comunidade) and make use of them (Gráficos 41 and 42), though seven percent are unaware and 17 percent make little or no use of them. Most use is made of them in improving client service, better resolution of cases, and reducing waiting times; less use in improving physical installations or handling peak demand (Tabela 6).

*Respondents show a strong sense of professionalism (which also suggests a substantial sense of unity across different types of Health Unit).*

- Professionals report that they are motivated more by job stability, elements contributing to their professional standing (job content, learning opportunities, training opportunities), and nearness to home than by salary or flexible hours (Gráficos 43-49).
- Respondents perceive the differences between PSF and Basic Units as residing in salary levels, team methods, types of service provided, length of working week, and to some extent availability of resources. Perceptions of differences in professional standing were far less marked (Tabela 7).

*Teamwork is perceived to work well, across different types of unit, but the exact ingredients of this are not clear.*

- There was a strong perception (92 percent), shared by staff of PSF and Basic Units alike, that teams worked well (Gráfico 50). It is not clear what are perceived to be the most important factors in this (Tabela 8), but good management and clarity in task attribution appear to be at the top (a common position in Basic and PSF Units).



## APPENDIX E. Managing Curitiba's Public Health System: Instruments and Impacts

Strategic areas	Instruments	Intended/possible health impacts	Intended/possible management impacts
<i>Client-orientation</i>			
Reaching the client	<ul style="list-style-type: none"> <li>• Geographical decentralization via Districts and Health Units (1991); Units are linked by public transport.</li> <li>• Family medicine - Programa Saúde da Família (1993).</li> <li>• Programa de Agentes Comunitários de Saúde – PACS (1999).</li> </ul>	<ul style="list-style-type: none"> <li>• Easier client access to health services.</li> </ul>	<ul style="list-style-type: none"> <li>• Decentralization devolves accountability.</li> </ul>
Empowering the client	<ul style="list-style-type: none"> <li>• Municipal and local Health Councils (1991).</li> <li>• Central de Atendimento ao Usuário (1993): complaints system.</li> <li>• Avaliações da Comunidade (2004): telephone evaluation system.</li> </ul>	<ul style="list-style-type: none"> <li>• Community and individuals provide local knowledge.</li> </ul>	<ul style="list-style-type: none"> <li>• Community and individuals provide expectations and information on service quality.</li> </ul>
Making the client's life easier	<ul style="list-style-type: none"> <li>• Acolhimento Solidário (1998): client-friendly process re-engineering.</li> </ul>	<ul style="list-style-type: none"> <li>• Reduction of clients' transaction costs (e.g. waiting times).</li> </ul>	<ul style="list-style-type: none"> <li>• Management of SMS' external relations.</li> </ul>
<i>Use of information</i>			
Social knowledge	<ul style="list-style-type: none"> <li>• Planning of services linked to area-based knowledge and analysis.</li> <li>• Decentralized Health Units (especially PSF Units) and the use of Agentes Comunitários de Saúde.</li> </ul>	<ul style="list-style-type: none"> <li>• Area knowledge allows prioritization and concentration of resources, hence more effective services.</li> <li>• Knowledge of individuals and families permits more effective services.</li> </ul>	
Medical knowledge	<ul style="list-style-type: none"> <li>• Evidence-based medicine (EBM):               <ul style="list-style-type: none"> <li>• Epidemiological activities.</li> <li>• Clinical protocols (from 1998).</li> <li>• Training (see below).</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• More effective clinical procedures.</li> </ul>	<ul style="list-style-type: none"> <li>• Process standardization, through protocols, can reap benefits from economies-of-scale and can facilitate performance measurement.</li> </ul>
Information technology	<ul style="list-style-type: none"> <li>• Computerized information system from 1988.</li> <li>• Cartão Qualidade Saúde and Prontuário Eletrônico</li> </ul>	<ul style="list-style-type: none"> <li>• Improves accuracy and timeliness of clinical information.</li> <li>• Improves</li> </ul>	<ul style="list-style-type: none"> <li>• Improves accuracy and timeliness of managerial information.</li> </ul>

	de Saúde (1999).	epidemiological information (EBM), thus contributes to more effective clinical processes.	<ul style="list-style-type: none"> <li>• Facilitates horizontal and vertical coordination.</li> <li>• Facilitates performance-based management.</li> </ul>
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<b>Strategic areas</b>	<b>Instruments</b>	<b>Intended/possible health impacts</b>	<b>Intended/possible management impacts</b>
<b>Specialization</b>			
Choices to produce or finance/regulate health services	<ul style="list-style-type: none"> <li>• Municipal production of primary health care and regulation and financing of much secondary and most tertiary health care.</li> <li>• Shift of emphasis from curative/secondary &amp; tertiary to preventative/primary medicine.</li> </ul>	<ul style="list-style-type: none"> <li>• Vertical specialization, with an emphasis on preventative healthcare, allows SMS to concentrate on public-goods aspects of health (for instance in programs like Mãe Curitibana and C�rie Zero - Amigo Especial).</li> </ul>	<ul style="list-style-type: none"> <li>• Emphasis on primary and preventive healthcare cuts demand for (or allows more specialized use of) secondary and tertiary services.</li> </ul>
Horizontal specialization	<ul style="list-style-type: none"> <li>• Problem-specific programs: Mãe Curitibana, specific diseases, etc.</li> <li>• Standardization of Health Unit processes, notably Protocols</li> </ul>	<ul style="list-style-type: none"> <li>• Specialization and concentration of resources can lead to more effective clinical processes.</li> </ul>	<ul style="list-style-type: none"> <li>• Specialization and process standardization can provide benefits from economies-of-scale and can facilitate performance measurement.</li> </ul>
Coordination of services	<p>Coordination (“integra�o”) of different health services, with Health Unit as gatekeeper:</p> <ul style="list-style-type: none"> <li>• Central de Marca�o de Consultas Especializadas (1994).</li> <li>• Sistema Integrada de Servi�os de Sa�de (2002).</li> </ul>	<ul style="list-style-type: none"> <li>• “uma rede integrada de pontos de aten�o que presta assist�ncia cont�nua � popula�o, no tempo certo, no lugar certo, como custo certo e a qualidade certa”</li> </ul>	<ul style="list-style-type: none"> <li>• Coordination reduces unnecessary (secondary and tertiary) activities.</li> </ul>
<b>Human resource management</b>			
Careers	<ul style="list-style-type: none"> <li>• Career rules: merit-based entry; tenure; inflexible career-development rules.</li> <li>• Training: permanent professional training; U. Toronto training in family health and EBM, from 1995</li> </ul>	<ul style="list-style-type: none"> <li>• Training keeps staff familiar with medical advances (including EBM).</li> </ul>	<ul style="list-style-type: none"> <li>• Career rules produce competence and shield staff from politics, but do not promote performance.</li> <li>• Training gives job satisfaction (in the absence of career development).</li> </ul>
Bonus schemes	<ul style="list-style-type: none"> <li>• Non-contingent bonuses (supply problems (PSF bonus; IDQ, 1994; GGEM, 2002)</li> </ul>		<ul style="list-style-type: none"> <li>• Non-contingent bonuses mitigate specific labor-market shortages, e.g. getting</li> </ul>



	<ul style="list-style-type: none"> <li>Contingent bonuses as performance incentive (PIQ, 1995; IDQ, 2000)</li> </ul>		<ul style="list-style-type: none"> <li>staff to work in outlying Units).</li> <li>Contingent bonuses only directly affect extreme cases of performance.</li> </ul>
Managers	<ul style="list-style-type: none"> <li>Managers are political appointments chosen from career public servants</li> </ul>		<ul style="list-style-type: none"> <li>Management is technocratic and well integrated into SMS</li> </ul>

<b>Strategic areas</b>	<b>Instruments</b>	<b>Intended/possible health outcomes</b>	<b>Intended/possible management impacts</b>
<i>Performance m</i>			
Planning	<ul style="list-style-type: none"> <li>Informal or ad hoc strategic planning (e.g., GERUS, 1995)</li> <li>Municipal Health Plan 2002-2205 and Annual Operating Plan (POA).</li> </ul>		<ul style="list-style-type: none"> <li>Widespread strategic-planning/ problem-solving culture.</li> </ul>
Management contracting	<ul style="list-style-type: none"> <li>Non-enforceable Management Contracts/POA (2000), with c. 60 targets.</li> <li>Monitoring of POA</li> </ul>		<ul style="list-style-type: none"> <li>Management contracting: clarifies priorities; identifies problems; and (with IDQ evaluation) reinforces teamwork.</li> </ul>



**APPENDIX F. Selected Management Contract Targets by Health District in Curitiba, January - December, 2004**

	Population (number)	Coverage (percent)	Target (number) (= A x B)	Actual (number)	Target fulfillment (percent) (= D / C)
	A	B	C	D	F
<b><i>Cobertura de Consultas Médicas</i></b>					
Santa Felicidade	183,152	150%	274,728	376,088	137%
Boa Vista	225,696	160%	361,114	418,020	116%
Boqueirão	192,858	150%	289,287	426,639	147%
Portão	286,052	130%	371,868	464,966	125%
Pinheirinho	161,401	150%	242,102	249,426	103%
Cajuru	194,113	85%	164,996	170,802	104%
Matriz	204,516	40%	81,806	80,783	99%
Bairro Novo	139,587	150%	209,381	355,080	170%
Total/average	1,587,375	126%	1,995,281	2,541,804	127%
<b><i>Cobertura de Proc. Odontológico / Habitante</i></b>					
Santa Felicidade	183,152	150%	274,728	188,974	69%
Boa Vista	225,696	160%	361,114	247,419	69%
Boqueirão	192,858	150%	289,287	180,629	62%
Portão	286,052	130%	371,868	317,211	85%
Pinheirinho	161,401	150%	242,102	250,064	103%
Cajuru	194,113	85%	164,996	160,959	98%
Matriz	204,516	40%	81,806	76,380	93%
Bairro Novo	139,587	150%	209,381	170,669	82%
Total/average	1,587,375	126%	1,995,281	1,592,305	80%
<b><i>Cobertura Vacinal de Menores de 1 ano - BCG</i></b>					
Santa Felicidade			2,726	2,781	102%
Boa Vista			3,314	3,318	100%
Boqueirão			3,211	3,014	94%
Portão			4,477	3,653	82%
Pinheirinho			2,968	3,032	102%
Cajuru			3,158	3,112	99%
Matriz			2,163	2,956	137%
Bairro Novo			2,789	2,617	94%
Total/average			24,806	24,483	99%
<b><i>Cobertura de Visitas Domiciliares</i></b>					
Santa Felicidade	45,788	204%	93,408	235,095	252%
Boa Vista	54,424	204%	111,025	292,538	263%
Boqueirão	48,214	204%	98,357	264,758	269%
Portão	71,498	204%	145,856	385,603	264%
Pinheirinho	40,350	204%	82,314	310,518	377%
Cajuru	48,528	204%	98,997	356,505	360%
Matriz	51,129	100%	51,129	61,879	121%
Bairro Novo	34,897	204%	71,190	225,338	317%
Total/average	394,828	191%	752,275	2,132,234	283%

	Population (number)	Coverage (percent)	Target (number) (= A x B)	Actual (number)	Target fulfillment (percent) (= D / C)
	A	B	C	D	F
<b><i>Cobertura de Novas Inscrições de Gestantes</i></b>					
Santa Felicidade	2,098	100%	2,098	1,979	94%
Boa Vista	2,554	50%	1,277	2,556	200%
Boqueirão	2,793	100%	2,793	2,661	95%
Portão	3,117	100%	3,117	3,295	106%
Pinheirinho	2,284	100%	2,284	2,830	124%
Cajuru	2,432	100%	2,432	2,693	111%
Matriz	951	90%	856	874	102%
Bairro Novo	2,447	100%	2,447	2,647	108%
Total/average	18,676	93%	17,304	19,535	113%
<b><i>Concentração de exames anti-hiv para 100% das gestantes</i></b>					
Santa Felicidade			1,979	1,751	88%
Boa Vista			2,556	2,060	81%
Boqueirão			2,661	2,267	85%
Portão			3,295	2,880	87%
Pinheirinho			2,830	2,473	87%
Cajuru			2,693	2,218	82%
Matriz			889	684	77%
Bairro Novo			2,647	2,397	91%
Total/average			19,550	16,730	86%
<b><i>Analisar 100% dos óbitos infantis dentro dos critérios p/ análise</i></b>					
Santa Felicidade			30	23	77%
Boa Vista			31	31	100%
Boqueirão			23	23	100%
Portão			54	54	100%
Pinheirinho			40	39	98%
Cajuru			42	41	98%
Matriz			25	24	96%
Bairro Novo			30	27	90%
Total/average			275	262	95%
<b><i>Cobertura Total de Inscrição de Hipertensos</i></b>					
Santa Felicidade	16,989	62%	10,533	10,243	97%
Boa Vista	20,856	50%	10,428	12,594	121%
Boqueirão	19,715	50%	9,858	12,016	122%
Portão	20,643	70%	14,450	14,616	101%
Pinheirinho	13,798	65%	8,969	10,405	116%
Cajuru	17,256	53%	9,146	10,105	110%
Matriz	12,443	35%	4,355	4,554	105%
Bairro Novo	13,623	100%	13,623	9,829	72%
Total/average	135,323	60%	81,361	84,362	104%

Source: SMS

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