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Hospital Governance in Latin America

Results from a Four Nation Survey

Richard J. Bogue, Claude H. Hall, Jr., and Gerard M. La Forgia

April 2007



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**Human Development Department
Latin America and Caribbean Region
The World Bank**

and

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HEALTH, NUTRITION AND POPULATION (HNP) DISCUSSION PAPER

Hospital Governance in Latin America: *Results from a Four Nation Survey*

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Abstract: The objective of this research was to identify types of hospital governance in Latin America and to examine whether and how these governance types are associated with hospital performance. The authors also sought to explore hospital governance conceptually and contextually within national and international experience.

The research was based on survey of nearly 400 hospitals in Argentina, Brazil, Colombia and Mexico. The authors conducted a cluster analysis of the results identifying four governance types based on organizational elements theorized to affect hospital behavior: (1) budgetary unit of government; (2) autonomous unit of government; (3) corporate unit of a private conglomerate or broader, private hospital system; or lastly (4) a private *and* autonomous unit. These types were compared in five analyses: (a) administrators' ratings of their own hospital's performance; (b) hospital performance indicators, such as occupancy and costs per bed; (c) performance tracking vis-à-vis standards; (d) ratings of criteria for selecting leadership; and (e) hospital administrators' qualifications.

The corporate and private governance types were generally associated with better performance. Performance differences were noted for facility and equipment upkeep, availability of medicines and auxiliary services, administrative and labor efficiency, and clinical quality, including the level of nursing training. Hospitals governed under private and corporate models tended to have more non-clinical, business-oriented leadership, while the budgetary governance type seems to be obligated to pursue a more broadly defined set of accountabilities.

Freeing hospitals from institutional and governmental control, referred to as facility-based management, seems to be associated with better hospital performance. The values underlying facility independence, however, must exist simultaneously with other socially or politically defined priorities and accountabilities. Commitment to pursue higher-performing governance models will be possible only through thoughtful examination of the internal and external contexts that shape hospital behaviors, including market strategies, regulations, local definitions of autonomy, and the scope and distribution of stakeholder incentives.

Keywords: governance, hospital governance, hospital management, health systems development and reform.

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

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ACRONYMS AND ABBREVIATIONS

AHA	American Hospital Association
ANOVA	Analysis of Variance
CEO	Chief Executive Officer
ESE	State Social Enterprises
GDP	Gross Domestic Product
IMSS	Mexican Social Security Institute
ISS	Social Security Institute
NCNB	National Center for Nonprofit Boards
NPM	New Public Management
OECD	Organization for Economic Cooperation and Development
SUS	Unified Public System

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INTRODUCTION

Hospitals are key actors in national health systems, and invariably account for a large share of spending. Consequently, governments, health professionals, communities, and other stakeholders are deeply concerned about how hospitals are governed and how they perform (OECD, 2004). However, stakeholders may emphasize varied priorities such as access to care, fiscal efficiency, service quality, transparent accountability, or public service. Hence, policy makers attempting to shape the future of national health systems are faced with competing agendas, and various ideas about who should be making decisions governing the behavior and shaping the performance of hospitals. Governance arrangements, which generally are embedded in an organizational form, will predispose hospitals to better performance on different goals.

This study identifies organizational governance types in Latin American hospitals and explores how these different governance types are related to hospital performance. This is achieved through the examination of results from a survey on hospital governance conducted in 2002 to 2003 in 397 hospitals in Argentina, Brazil, Colombia, and Mexico.

In the sections that follow, background for the study is presented, examining previous research on hospital governance and linking hospital governance to issues of hospital performance. The methodology section includes information about the survey design and procedures, the sample, as well as background information on the four countries and the hospitals from those countries that responded to the survey. The findings about relationships between governance types and indicators of hospital performance and characteristics of leadership are then presented. An exploration of the meaning of the results, as well as their application to health policy and implications for future research, is reserved for the final sections.

1. HOSPITAL AND HEALTH SYSTEM GOVERNANCE: RESEARCH AND EXPERIENCE

Governance may be defined as the structures and functions of an organization that set and enforce policies and exercise the ultimate authority for decisions made in or on behalf of the organization¹ (Umbdenstock & Hageman, 1991; Holland, Ritvo, & Kovner, 1997; Pointer & Orlikoff, 1999). As such, governance practices underlie and are presumed to enable all the subsidiary structures and functions that take place within an organization. Nurses, for example, perform much of the direct patient contact as well as contact with the patient's family. Physicians take the lead in the life and death decisions of medical care. Governmental agencies, typically, require official reports from hospitals when a patient dies and, along with private interests in many settings, establish policies about how services are to be delivered and paid for. Hospital administrators have management duties related to nurses, physicians and government agencies alike. Further, those with governing authority are responsible for ensuring that these

¹ In this paper, we focus on governance in the context of hospitals and health care organizations, and not expanding our discussion of governance to other kinds of organizations, including political entities.

subsidiary actions are done appropriately and in the best interests of the hospital's stakeholders (See Box 1).

Theoretically, governance authority includes oversight of administrative practices and fiscal performance, planning and policy making, and accountability to individuals, communities, payers and governments. This oversight may be conducted by individuals, groups, or organizations, such as the agents of government agencies (e.g., a health ministry or secretariat), hospital boards, hospital administrators, or combinations of these. In the US, boards have become the dominant form of exercising governing authority in hospitals.

Along these lines, important functions of hospital governance include:² (1) providing financial stewardship; (2) formulating future strategy; (3) evaluating the facility director; (4) ensuring clinical efficiency and quality; and (5) representing the hospital's various stakeholder groups. In practice, these different actions can be, and often are, carried out by different individuals or bodies authorized to take responsibility for those actions. And the means of carrying out these authorities may vary between circumstances or even over time. In short, understanding governance and how it affects hospital performance requires an examination of *who decides what, by what means, and to what effect*.

2. OVERVIEW OF GOVERNANCE THEORY AND RESEARCH IN THE UNITED STATES

In the United States from the 1800's to the 1960's, hospitals were conceived chiefly as charitable institutions for the provision of medical care (Totten, Orlikoff, & Ewell, 1999). With the explosion in research, education, technology, facilities, and, especially, evolving payment systems in health care over the past half century, hospitals have shifted from being physician workshops³ to becoming complex institutions facing myriad demands within a highly regulated framework that limits freedom of action. As this evolution occurred, governance—formerly focused on raising funds or conferring honor via board appointments—came to require active oversight of hospital performance while also putting severe strains on the capacity of part-time board members to provide active and knowledgeable oversight. As a result, those with governance authorities began taking on varied new roles, such as:

- Ensuring access to a rapidly broadening array of medical and non-medical services;
- Enhancing the effectiveness and quality of care delivery;
- Responding to the corporatization of medical care providers, suppliers, and insurers;
- Containing the rapidly rising costs to the public, businesses, and insurers of services; and
- Transforming the mission of the hospital to respond to and anticipate the evolving medical care and public policy environment.

² American College of Healthcare Executives; cited in Coile, (1994)

³ The term refers to hospitals in the early 20th century in the US. At that time, hospitals became an integral part of medical practice and accorded physicians greater power, but with little oversight or control (Starr, 1982).

Box 1: Board Responsibilities

The National Center for Nonprofit Boards (NCNB) strives to improve the effectiveness of all kinds of not-for-profit organizations in the US. NCNB identifies 10 basic responsibilities for nonprofit boards (Ingram, 1996). These are:

1. Determine the organization's mission and purpose
2. Select the chief executive
3. Support the chief executive and assess her or her performance
4. Ensure effective organizational planning
5. Ensure adequate resources
6. Manage resource effectively
7. Determine, monitor, and strengthen the organization's programs and services
8. Enhance the organization's public standing
9. Ensure legal and ethical integrity and maintain accountability
10. Recruit and orient new board members and assess board performance

In the midst of this profound shift in what governing bodies for hospitals might be expected to do, analysts have offered guidance and varied recommendations for health care governance. More frequently, articles and books about hospital governance have discussed the following (AHA, 1997; Coile, 1994; Holland, et al., 1997; Totten et al., 1999; Weil, et al., 2001; Davidow and Hall, 1999; the Governance Institute, 1996):

- Board structures (e.g., number of members and their composition, experience, and selection);
- Board roles (e.g., selection of a director, leading and monitoring medical staffs, handling community relations, meeting fiduciary/regulatory responsibilities, and conducting self-education and evaluation);
- Board participation in population health improvement, promotion and protection; and
- Board locus of control (e.g., multi-hospital system versus hospital boards, interlocking directorates in vertically integrated health systems, insider versus outsider board members)

While numerous paradigms, systems, tools, and principles have been offered for governance of U.S. hospitals in the last four decades, assessment of their success has been mixed and consensus on priorities and strategies for boards often transitory (The Governance Institute, 1996; Health Research and Educational Trust of New Jersey, 1999). Issues that continue to challenge governance experts in the United States include:

- What is the appropriate level of investment in public/ population health for hospitals?
- What are the merits of integrated delivery systems versus local market-driven contracting and purchasing of services?
- What governance strategies are associated with cost-effective provision of appropriate, quality health care?
- How can the broader health care network (or health system) achieve acceptable returns on investment to sustain needed services, research, education, and new technologies?

Theory and research on hospital governance have often been found to be inadequate to the challenge of helping answer these critical questions. Pointer and Ewell (1994) examined the literature on health care governance by reviewing six theories that have been used as perspectives on governance. These are briefly overviewed in Box 2, as a means of organizing some of the previous research (cited by Pointer and Ewell) and to indicate some gaps.

Where have these theories brought the field of hospital governance research in the U.S. with respect to providing clear guidance on organizational changes to strengthen accountability and improve hospital performance? Alexander (1991) is one of the most widely published hospital governance researchers, and he offers this answer in a classic review of the state of research in hospital governance:

Box 2: Summary of Theories on Governance

Contingency theory holds that organizations perform best when they have effective means of understanding and acting on the contingencies they face. Hence, how they organize management and governance mechanisms for examining and responding to ambiguity and change defines organizational success or failure.

Resource-dependence theory assumes that surviving and thriving for an organization is much the same as it is for organisms, and is based on identifying resources, especially through relationships with other individuals, groups and organizations, and exploiting those resources that are available in the environment. Hence, how organizational decision makers work with internal and external constituencies defines success or failure.

The **Institutional perspective** views organizational performance as an outcome of its efforts to meet two separate imperatives: the technical imperative—conducting its operations in an efficient manner—and the institutional imperative—conforming to the beliefs and norms of its social milieu. Hence, how an organization’s leadership balances these two imperatives—which often do not coincide with each other—defines organizational success or failure.

For the remaining three of the theoretical approaches they review, Pointer and Ewell report being unable to identify any empirical research based on the theories, although the theories have been used to discuss hospital performance and/or hospital governance.

Agency Theory focuses on the distribution of the organization’s work to different parties whose interests may conflict. It is called Agency Theory, because an agency relationship exists when a “principal” authority, such as a board, delegates responsibility to its “agent,” such as a hospital director. Under agency theory, organizational success or failure may be seen as dependent upon the methods by which principals and agents define their respective roles and assure compliance with these definitions.

Transaction Cost Theory has been widely used to identify and examine the transaction costs—those investments of labor or other resources required to complete an exchange of value between two or more parties—of centralizing hospitals within a larger administrative structure, such as a vertically integrated health system. For example, what approaches to multi-hospital system governance and decision making have the lowest transaction costs (i.e. are most efficient)?

Population Ecology Theory suggests that groups—or species—of organizations are predisposed to success or failure because they happen to possess characteristics that broader evolutionary changes—in our case, in the health and hospital fields—will reward or punish. Hence, how well an organizational type is already aligned with the emerging environment defines success or failure. For example, does a general socio-cultural progression toward privatization of previously public assets pre-determine the eventual demise of public hospitals?

Although there is an extensive literature on hospital trustees and governance, the vast majority of these writings tend to be either anecdotal, focusing on case examples of hospital boards, or prescriptive, delineating problems with board functioning and specifying normative solutions to these problems. This literature is contained, for the most part, in hospital trade and practitioner journals and is not based on a solid foundation of theoretical or empirical research. (p. 396)

Pointer and Orlikoff (1999) concur by providing these estimates:

A very small proportion of the organization and management literature is devoted to governance. We estimate that about 95 percent of this small body of work [on hospital governance] either describes boards or offers primarily anecdotal prescriptions for improving them. The remaining five percent is scientific. (p. 24)

In short, in the U.S., long-term trends in hospital payments and major changes in how hospitals operate have prompted voluminous writings, and prosperous consulting businesses about hospital governance. While these efforts would seem to offer the promise of solid guidance for governance excellence, the research that exists offers little help. Box 3 summarizes the overall quality of hospital governance research in the United States.

While the United States may account for a disproportionate share of writing about hospital governance, as already noted the bulk of that work is composed of prescriptive guidance about structural features of governing boards and the roles and responsibilities of the members of boards. The literature on governance research and how governance relates to hospital performance, overall, is limited in scope and short of depth. Perhaps governing boards are too common or homogeneous in the US context to spark the interests of researchers. Variation in approaches to governance may be unnatural to a hospital industry that may be, relatively speaking, vigorously but equitably regulated. Policy making in the US health system tends to focus on financing, thus limiting variations in governance that might emerge when other values—such as, quality, access, equity, and solidarity—have equal or even greater importance in policy making.⁴ Discussing what explains this phenomenon is beyond the scope of this paper. But compared to many other contexts, changes in governance arrangements seem relatively modest and incremental. Policy frameworks for organizational change tend not to be associated with hospital governance issues, and experiments in governance associated with those changes seem almost nonexistent.

3. OVERVIEW OF GOVERNANCE THEORY AND RESEARCH INTERNATIONALLY

Internationally, research on hospital governance has recently begun to emerge. Unlike the US where most hospitals have a high degree of decision making autonomy and where a commonly recognized governing body can at least be identified, in many countries there is little systematic information on hospital governance arrangements.⁵ Instead, most work on hospital governance has been framed in terms of theories or policy prescriptions that, along with other organizational and financial arrangements, create conditions for autonomous hospital management (Harding & Preker, 2003a). Such arrangements are seen to contribute to a performance-enhancing institutional environment. This is often presumed to be true particularly in public hospitals where autonomy is often weak or non-existent. Harding and Preker focus on how governance arrangements, defined as the “relationship between the organization and its owner(s),” (p. 25)

⁴ Fuchs and Emanuel (2005) demonstrate the narrowness of US reform policy making which is framed almost entirely in terms of financing mechanisms. The authors conclude their assessment of what it might take for comprehensive change in the US by observing: “Over the long term, reform is likely to come in response to a major war, depression, or large-scale civil unrest.”

⁵ The World Health Organization (2003) has promoted a concept of Health Promoting Hospital Policy which identifies 18 core strategies to assure and improve hospital quality.

Box 3: Summary of Quality of US Literature on Hospital Governance

Pointer and Ewell (1994) identified five problems in research on health service organization governance: (1) the literature on governance is vast, but scientific approaches to governance are very rare; (2) two closely related theories predominate (Contingency Theory and Resource Dependency Theory), and neither gives much guidance on how best to govern a hospital; (3) “Governance research lacks a solid conceptual foundation. To make any significant strides in improving governance, we need a model of what boards *do* (emphasis added)—their roles and responsibilities.” (p38); (4) except for the most general nonscientific prescriptions, how governance affects hospital performance is almost entirely missing from the literature on governance; and (5) the little research that has been conducted has been static, giving little attention to how changes in governance that vary over time affect governance-related and other outcomes.

A more recent review of the empirical literature on hospital governance conducted for this paper does not answer the issues at hand. However, Alexander (1991) offers specific guidance that helps guide this study’s approach to examining hospital governance. He identified four methodological issues, which continue to suppress research in the area:

1. There is a lack of data on boards, especially on the governance process, and such data as there are tend to rely on reports from hospital administrators because board members are shielded from participation in research.
2. Governance is much more than the structure and composition of the board. “It is a process through which [board members] in cooperation with top administrative officials and medical staff, develop and oversee general policies for the institution.” (p. 399)
3. Criticisms of previous attempts to link board characteristics with hospital performance “are particularly germane since boards are typically not directly involved in the operations of a health care organization except through the hiring and firing of the managing director. Their role as overseers of organizational policy suggests that the board’s effect on hospital performance may follow a very circuitous path indeed. Modeling such a relationship will continue to be empirically difficult unless more precise theoretical linkages can be established.” (p. 400)
4. And as to establishing causality, “even if an empirical relationship is established between board characteristics and hospital performance measures, can such performance be attributed to the board, or conversely, do better performing hospitals attract or maintain particular board types?” (p. 400)

can contribute to an accountability environment or “generate incentives” for improved performance. Although they recognize that the mechanisms of governance can vary considerably, they maintain that public hospitals in many developing countries generally lack good governance due to poorly defined and unclear objectives, weak or absent supervisory and oversight structures, lack of market exposure, political interference, and lack of information. They advocate that organizational reforms that support autonomous decision making at the hospital level would improve governance by promoting a strong performance orientation, strengthening supervisory structures and enabling survival in a competitive environment. Developing countries moved beyond structural solutions and decentralization in the 80’s and 90’s to encouraging organizational reforms in governance through exposure to competitive pressures, financial and performance incentives, and policy encouragement of growth and integration. The authors emphasize world-wide interest among policy makers in improving equity, efficiency, and responsiveness in their national health systems through “marketizing” reforms.⁶

⁶ Preker and Harding also stress the importance of hospitals as sources of accessible, quality care as well as sources of employers and trainers of skilled professionals within these integrating systems. It is important to note that “marketizing” does not mean privatization. Rather, the term implies creating an institutional environmental and applying instruments borrowed from the private sector, that improve accountability and generate incentives for performance.

Jakab, et al (2002), Harding and Preker (2003b) and Shaw (2004) described a contemporary model for hospital reform based on introducing market forces, sometimes referred to as ‘New Public Management’ (NPM). This model is intended to introduce transparent, market-aligned business-like practices to produce continuous improvements in public services and programs by emphasizing leverage points to influence responsibility, performance, and accountability. NPM offered a view of how strategies like autonomization, corporatization, and privatization would, at least theoretically, to improve performance. These strategies are both consonant with modern business practices and are linked to health sector reform activities that have emerged in developing countries. NPM has relevance to the *functions* of governance and the allocation and exercise of decision making authorities that should support better organizational performance—that is, as Alexander (1991) exhorted, what decision makers *do*—without dependence on one or another governing *structure*.

Introducing facility-level management in public institutions to improve their performance by removing day-to-day hierarchical control can be challenged in several ways. For example, autonomy, characterized by decentralized forms of authority and control, has been theorized to produce better performance. However, autonomy can *vary across functions* such as strategic management, finance, marketing, medical management, human resources, and procurement. That is, without examining autonomy with respect to specific functions of governance, it is difficult to tell what autonomy means in practice, let alone how more autonomy might influence performance. Moreover, there is no model that effectively predicts varied combinations of decision rights across these functions will improve (or not) performance.

Implementing output-based mechanisms for funding services to improve performance rather than traditional, input-based, line-item budgets also causes concern among some policy makers and analysts. These mechanisms expose public hospitals to financial risk under the theory that financial accountability is more likely to generate efficiency and productivity. But policymakers must balance incentives for revenue maximization with regulations to ensure the provision of socially-relevant care (community service obligations) and to contain cost escalation pressures.

Harding and Preker (2003a) argue that successful reforms depend on assuring that markets do not display monopolistic behavior and that organizational funding and provider payment systems are aligned with the aims of organizational reform. Their study of cross country comparisons and case studies suggests that imbalances or misalignments among five elements help determine hospital behavior and can undermine the success of intended change efforts. The five elements influencing hospital behavior are:

- Allocation of decision rights;
- Degree of market exposure;
- Distribution of residual claimant status,
- Structure of accountability arrangements; and
- Policies and reimbursement of social functions.

Examining these five elements, the authors categorized hospitals and other organizations along a continuum reflecting governance and management discretion, scope of authority, and accountabilities. These four governance types are described below:

- **Budgetary** organizations receive little autonomy or exposure to market forces; governmental officials and rules control strategic and tactical choices about the financing, production, and delivery of services; government staff/policies align health sector and hospital objectives; and such organizations focus on accountability for inputs and finances.
- **Autonomized** organizations receive marginally greater autonomy intended to improve efficiency and quality through tighter management accountability for tactical choices; management may retain net revenues as an incentive for performance improvement; oversight focuses more narrowly on specific objectives, which may represent economic, fiscal, and social functions.
- **Corporatized** public organizations⁷ are afforded greater managerial autonomy in order to control inputs and service delivery *to mimic some of the behaviors of private corporations* while retaining obligations for achieving social objectives; structural independence and responsibility for financial performance; the organization is subject to some market pressures and competition; accountability may be structurally assured through a combination of hierarchical controls in some areas, a broadly empowered governing board, and some agreement on plans between the government and the organization; accountabilities for social objectives are typically subsidized.
- **Privatized** organizations, as the name suggests, are privately owned (albeit they may be non-profit or for-profit), subject to private ownership and perhaps board authority, and subject to market competition; they enjoy the incentives, rewards, and penalties associated with producing revenues and controlling costs; success in advancing social objectives is more dependent on systemic reforms and regulatory interventions.

Hawkins and Ham (2003) offer a framework for evaluating reform efforts that parallels the above-mentioned five elements that impact hospital behavior. The authors' thesis is that more successful reforms rely on human resource development and reflect coherent market-oriented changes. To Hawkins and Ham, such strategies emerge from broader policy changes in public sector activities and management. One key lesson from this perspective is that these elements must be taken together, as part of an overall context of policy and health system change. Their view also emphasizes the value of public services and the importance of public concerns. Reform is imagined to be facilitated by clear central policies and a technically skilled public staff that balances the scale and pace of reforms with institutional capacities.

Formalized governing mechanisms by the standards of countries where governing boards are common are generally sparse in developing countries for two main reasons. First, most public hospitals are budgetary organizations, managed centrally by public agencies such as social security institutes and federal, state, or municipal governments. Notwithstanding the lack of consistent or validated evidence, there remains disenchantment with the poor performance of integrated public finance and delivery systems. The apparent weaknesses of the predominant mode of health service organization and delivery in Latin America and elsewhere in the developing world has continued to drive policy makers to search for alternative arrangements. Second, the vast majority of private hospitals is composed of small organizations held by an individual or small group of physicians. There is even less evidence on governance practices in the private sector. A recent study of non-profit hospitals in Brazil found informal and

⁷This term is used by Harding and Preker to refer to *governmental* entities.

overlapping governance and management functions Barbosa et al., (2002). Only larger facilities possessed formal organizational structures and applied modern business practices. The relationship between governance practices and performance was not examined.⁸

Do alternative organizational arrangements involving decision-making autonomy result in better hospital performance? Drawing mainly on case study material, the little empirical evidence that exists offers mixed results. The varied conclusions may result from the severe data limitations that compromise the design of studies. Another reason for the lack of evidence about autonomy may be the confounding effects that result from the introduction of simultaneous and parallel reforms (e.g., new payment systems, system-wide regulatory changes, etc.) and partial or uneven implementation.

In their review of the literature on hospital autonomy, Castaño, Bitrán, and Giedion (2004) express pessimism that organizational autonomy improves hospital performance in part due to implementation difficulties. They cite a number of studies, including:

- Five cases examined by Govindaraj & Chawla (1996) found little impact on efficiency and quality (Ghana, Kenya, Zimbabwe, India and Indonesia). Equity appeared to be negatively affected in some cases. Further, autonomy did not appear to improve accountability.
- In their study of five autonomous hospitals in Zambia, Kamwanga, et al (2004) reported no performance impact. Also, the hospitals remained dependent on centralized budgets.
- Eid (2001) reported that due to implementation failures of a hospital corporization policy in Lebanon, board were granted little decision making rights. Board politicization resulted in lost transparency and independence of decision making.

Nevertheless, recent comparative research in Brazil that matched public hospitals operating under autonomous organizational arrangements with hospitals operating under institutionally-administered arrangements found that the former demonstrate significantly higher levels of production, efficiency, and quality (Costa & Mendes, 2005; Mendes & Costa, 2005). Bitrán, et al (2005) reported similar results in a comparative assessment of Panamanian hospitals. McPake, et al. (2003) found that the establishment of autonomous organizational and governance arrangements in five hospitals in Bogotá, Colombia improved quality and efficiency. However, attribution of the results to autonomy was confounded by parallel reforms in payment mechanisms and overall significant increases in system financing. Four of the seven cases of autonomization from developing countries (Singapore, Hong Kong, Tunisia and Malaysia) included in Preker and Harding (2003) appeared to improve quality and outputs. However, the reforms also increased costs. Finally, Fidler et al. (2006) reported that reforms which granted greater decision rights to public hospitals in Austria and Estonia contributed to efficiency gains and cost containment.

Efforts to revise policy, adjust provider payment systems, introduce competitive market forces, and encourage management autonomy in Great Britain, its former colonies like New Zealand and Hong Kong, and developing countries like Malaysia, Indonesia, Tunisia, and Argentina often

⁸ In the US, the non-profit charitable hospitals faced an increasing competitive environment starting in the 1970s due in part to the emergence of for-profit hospital systems. This environment contributed the modernization of managerial and governance practices in non-profit hospitals. See Starr (1982) and Stevens (1989).

proved too ambitious. Several lessons that have relevance here emerged from the case studies constituting the Preker and Harding volume:

- Isolating policy changes from accompanying political processes and pressures in hospitals or in the health sector is difficult;
- Greater independence can play a role in providing transparency and clarity in the budgeting of public health systems and hospital funding;
- Comprehensive plans for health system and hospital reforms often are nullified by a political/governmental inability to adapt and implement critical aspects of the planning;
- Health reforms, if proposed as being cost-saving or having broad social benefit, are particularly vulnerable in times of economic challenge; and
- Political entities tend to fund changes incrementally due to competing needs, producing short-term thinking about goals that often undermines the larger intentions for and commitments to real change. Hospitals, as the largest object of public health expenditures in most countries, are acutely vulnerable to incrementalism in policy making, particularly in difficult economic times.

Across studies, autonomy is defined differently because it often responds to diverse organizational objectives across countries. As suggested above, governance is typically theorized as one of several reform components contributing to autonomy which, taken together, strengthen accountability and contribute to improved hospital performance. Governance mechanisms (such as boards, reporting requirements, and accountability standards) have not been examined in isolation from other components in order to determine their possible effects on performance. How governance is related to hospital performance is a major focus of this study.

4. NATIONAL CONTEXTS OF THE SAMPLE HOSPITALS

This study was designed as a multinational survey. As background for analyses presented later, the national contexts of the sampled hospitals is necessary. Four Latin American nations were selected to participate in the project: Argentina, Brazil, Colombia and Mexico. The selection of these countries reflected their importance in Latin America in terms of the size and cost of their health systems, suspected variations of policy and practice in hospital governance, as well as other factors.

Abrantes (2003) reviewed hospital reform efforts from the 1990's in several Latin American governments. Reforms in most cases were driven by a combination of public dissatisfaction with care options, quality and access, and government concerns with growing public expenditures without corresponding performance improvements or public satisfaction. These countries, emulating OECD countries, made efforts that to a greater or lesser extent sought to introduce market-oriented and managerial reforms to improve performance of their health systems and hospitals. They adopted such reforms for both funding and delivering public and hospital services.

This section describes the contexts of the hospital sector in the four countries from which the sample was drawn. It also describes dominant organizational and governance arrangements in

the public sector. Table 1 presents summary data on expenditures, Table 2 outlines major governance and organizational arrangements according to subset of dimensions under study here.

Table 1: Health System and Hospital Sectors in Study Countries, Summary Statistics

Indicador	Argentina	Brazil	Colombia	Mexico
Population (in millions) ^a	38.0	176.3	43.5	102.0
GDP p/c (int'l.\$) ^a	\$11,920	\$7,537	\$6,510	\$8,903
Health Spending per capita (int'l.\$) ^a	\$1,130	\$573	\$356	\$544
Health spending as % GDP ^a	9.5%	7.6%	8.4% ^b	6.1%
Public spending as % of total ^a	53%	42%	51% ^b	44%
Hospital spending as % of government health spending	83% ^a	70% ^b	37% ^{c,d}	67% ^c
No. of Hospitals	3,311 ^c	7,397 ^b	1,368 ^f	3,827 ^c
Public	1,271	2,588	630	1,005
Private	2,040	4,809	768	2,822
No. of Beds	153,065	471,171	55,463	103,977
Public	87,248	141,351 ^g	30,115	73,413
Private	65,817	329,820 ^g	25,348	30,564
% hospitals < 50 beds	NA	58%	NA	89%
^a 2001; ^b 2002; ^c 2003; ^c Excludes public spending in private hospitals and in former ISS hospitals ^d 2000; ^e 2004 ^f Includes 269,029 publicly-contracted bed in private facilities. ^g Estimated Sources: World Bank, World Health Organization.				

Of the four countries under study here, Colombia has developed and implemented the most far-reaching reforms, granting significant decision-making authority to public hospitals and creating autonomous governance structures. Nevertheless, decision-making authority is compromised by restrictions related to public labor law. Argentina, Brazil and Mexico have had more success decentralizing decision rights to states and municipalities, but not to facility managers. Budgetary organizations dominate the public hospital landscape in these countries; decision making is mostly centered within higher levels of government institutions. Argentina introduced a robust legal and regulatory framework for hospital reform in the early 1990s, but implementation has waned with relatively few hospitals adopting alternative organizational arrangements. Although most public hospitals in Brazil are directly managed by states and municipalities, a small number of states have recently introduced corporatization-type organizational arrangements. Reforms in Mexico have focused mainly on decentralization to the states which may set the stage for further changes in the organization and delivery of hospital care.

The private sector is a major provider of hospital care in all four countries, accounting for about two-thirds of the hospitals and one-quarter of the beds. Most private hospitals are small facilities, owned and operated by a group of physician-owners. The non-profit sector is particularly large in Brazil while growing in Colombia. With the possible exception of Brazil, systematic information on governance and organizational arrangements in the private sector is lacking.

Table 2: Governance and Organizational Arrangements in Study Countries

Country	Governance Arrangement	Allocation of Decision Rights	Market Exposure	Residual Claimant
Argentina	Public: (i) vast majority under hierarchical control of government: (ii) a handful of “Self-managed, decentralized hospitals” with legal personality governed by Board: Private: N/A	Very limited Possess decision-making authority on all inputs, service mix and managerial processes	Financed mainly through budget. Financed mainly by budgets but sell services to third parties and private individuals.	Very limited Retain all unspent revenues.
Brazil	Public: (i) vast majority under hierarchical control of government: (ii) About 1 percent of facilities under some form of autonomous administration Private: Non-profits governed: (i) by founding organization that may or may not possess a board.; (ii) facility-based board that is accountable to organization.	Very limited Possess significant decision-making authority on all inputs, investments, service mix and managerial processes Smaller facilities have little decision-making authority, and managed institutionally by founding organization; larger hospitals have high level of autonomy.	Financed mainly through budget. Financed mainly through budgets. In some cases can sell services. Financed mainly by public system but sell services to third parties and private individuals.	Very limited Retain unspent budgetary revenues. Retain all unspent revenues.
Colombia	Public: Most hospitals have been converted to State Social Enterprises (ESE) and are governed by a Board. The board is closely linked to government. Private: N/A	Possess decision-making autonomy on all inputs, but must follow rigid public sector rules for human resource management.	Financed mainly by budgets but can sell services to third parties and private individuals.	Retention of earnings in excess of spending requires government approval.
Mexico	Public: Nearly all under hierarchical control of government or a social security institution: Private: N/A	Very limited	Financed mainly through budgets.	Very limited

N/A: Information not available

ARGENTINA

Background: In 2001 the Argentine hospital sector consisted of 3,311 facilities; 43 percent were public and 55 percent private. About one percent of facilities belonged to the social security

system. Control of public facilities was distributed among three levels of government with 67 and 29 percent belonging to provincial (state) and municipal governments respectively, with the remainder operated by the central government. With the exception of municipal facilities, where hospitals are on average less than 30 beds, public hospitals are generally larger than their private counterparts. State governments managed over three-quarters of public beds while the remainder is distributed among the central government and municipalities. Bed distribution is highly skewed ranging from 7.9/1000 inhabitants in Buenos Aires, the capital city, to 2.6/1000 in Mendoza Province. Nearly all private hospitals are for-profit facilities.⁹ They derive revenues from contracts with the social insurance system (*Obras Sociales*) as well as from private insurers, pre-payment plans and out-of-pocket payments.

Hospitals account for about 83 percent of total public health spending. Hospitals represent an even greater share of provincial health spending, reaching 88 percent. Estimates of private hospitals spending are unavailable. An estimated 27 percent of inpatients in public facilities are insured through social security or private plans. However, only a small percentage of these facilities bill the insurers, and even fewer collect payments.

Governance and organizational arrangements: Most public facilities are operated as budgetary arms of provincial and municipal governments with few incentives for performance and weak accountability to both clients and government. Governance functions are located in government hierarchies. A 1993 Presidential Decree (573/93) created “*Hospitales de autogestión*.” These self-managed, decentralized hospitals permit states and municipalities to create specific norms or legislation. Such norms might include increased decision rights for hospital managers, greater market exposure through selling services to third parties and revenue retention, the creation of governance arrangements such as boards, and accountability mechanisms based on performance targets. Some provinces such as Salta and San Juan approved legislation granting considerable decision rights to public hospitals. Nevertheless, only a very limited number of hospitals were actually decentralized. Gonzalez Prieto and Alvarez (2002, 1999) examined the decentralization of decision rights in a sample of 25 facilities. Only one facility was classified as “fully decentralized,” and two as “partially decentralized.” The remainder had few decision rights over inputs, purchasing, capital investments, financing or planning. In theory, public hospitals can charge third party payers (social insurance system or private health insurers) for services rendered to their beneficiaries. However, facilities have been lax in developing, billing and collecting payments. This may relate to the fact that funds generated by selling services to third party payers are often collected by government and only partially transferred to the hospital.

Since the vast majority of Argentine public hospitals have not been granted independent legal status (legal personality), they are deemed an “administrative unit” by provincial or municipal authorities. As such, they are subject to public legislation regarding purchasing, hiring and firing practices and financial management. These functions are generally performed centrally by provincial and municipal governments. In contrast, the fully decentralized hospital identified by Gonzalez, Prieto and Alvarez was granted legal personality, manages all staff and assets and is governed by a board of directors.

⁹ Hospitals operated by foundations, charitable societies and community groups are considered private, non-profit institutions. Although systematic information on the private sector is lacking, governance arrangements and managerial autonomy vary enormously in non-profit and for-profit hospitals.

Policy Context: Although the policy context is favorable for altering governance arrangements and decentralizing decision rights to hospitals, states and municipalities appear reluctant to grant legal personality to “self-managed decentralized” public hospitals. In the Argentine context, independent legal status appears to be an important pre-condition to organizational reform. Nevertheless, full decentralization would require modifying human resource management practices which are highly centralized, protected by broad civil service rules, and defended vehemently by public employee unions. Most states and municipalities are unwilling to take on the political challenge that such changes would engender.

BRAZIL

Background: The Brazilian hospital sector is large, diversified and decentralized, as is its health sector in general. In 2002 the sector consisted of approximately 7,400 hospitals with 471,000 beds; 35 percent were public facilities and the remainder private. Hospitals accounted for about 70 percent of total public health spending. Estimates of private spending on hospitals are unavailable. Nearly 60 percent of hospitals have fewer than 50 beds. The proliferation of small hospitals is contrary to international trends oriented toward achieving economies of scale and scope.

The hospital sector can be divided into three main subsectors: (i) Public hospitals, owned and managed by federal, state and/or municipal health authorities; these are both publicly financed and managed and constitute the core of the Unified Public System (SUS). Municipal and state governments operate 71 and 23 percent of public facilities respectively while the federal ministry manages the remainder. (ii) Private hospitals working under contract for SUS. In 2002, 3,357 private hospitals were under contract with SUS. These facilities are publicly financed but privately managed, representing 45 percent of all hospitals, but offer 65 percent of publicly-financed beds.¹⁰ Most were non-profit institutions (*filantrópicos* and *beneficientes*),¹¹ and the remainder, for-profit hospitals (*lucrativos*). (iii) Private hospitals that do not work for SUS constitute 20 percent of the total facilities and 12 percent of total beds. Most of them for-profit and are privately financed and managed. Private insurance and pre-payment plans represent the major source of funding for these facilities.

Governance and Organizational Arrangements: Health system reform has centered on decentralization of decision rights to municipalities and, to a lesser extent, states. A limited number of states and municipalities have only recently turned their attention to granting decisions rights to the facility level.

¹⁰ Although most admissions (71 percent) occur in private facilities, SUS finances about 85 percent compared to 15 percent that are privately financed (mainly through private insurance).

¹¹ Non-profit, private hospitals are considered quasi-public, and are prioritized in receiving public funds relative to for-profit institutions. They operate under a particular kind of arrangement, the *convênio*, and are required to offer at least 60% of their beds to SUS patients.

Three types of organizational arrangements are found in public facilities.¹² The first is known as “direct administration” and is the dominant arrangement, accounting for the vast majority of public hospitals. Facilities under direct administration are essentially budgetary units which are owned and operated by a specific level of government. All hospitals under this arrangement follow a single set of rules as specified in federal framework legislation that stipulates labor, procurement and budgetary rules and procedures for the public sector. With some exceptions, these functions are mostly performed by government administrative units.

A second arrangement, known as “indirect administration,” applies to about two percent of public facilities. Indirect administration refers to a group of semi-autonomous, parastatal organizations in which managers hold slightly greater decision-making authority. Some possess governing boards. These can best be described as hybrid organizations, containing elements of both hierarchical control, typical of direct administration, and autonomy, typical of the final category of organizational arrangements entitled “autonomous” organizations.

Autonomous organizations, found in less one percent of public hospitals, have full autonomy over inputs, resource use and production. These can best be described as “corporatized” facilities. About half of these facilities were established through special legislation in the 1960s and 1970s and enjoy a high level of prestige and political support. Many are governed by a board and receive direct government transfers. A second group of “autonomous organizations” emerged in the late 1990s and early 2000s, and were a product of broader public administration reforms, based on framework legislation. One model, known as “Social Organizations,” has been successfully applied to 16 new state hospitals in São Paulo. Under this arrangement, the State of São Paulo contracts a public (usually a university) or private, non-profit organization to operate the facility under private labor, procurement and contracting law. Managers of these facilities are accountable to the board of the organization contracted by the State. These facilities are not permitted to sell services to third parties or charge fees to individual patients.

Little is known about governance arrangements in the private sector, and what is known is centered on the non-profit hospital subsector. Representing about 25 percent of all hospitals, the vast majority of non-profit facilities are affiliated with a heterogeneous array of philanthropic and charitable associations (*associações filantrópicas e beneficentes*), including private foundations, Masonic societies, charitable groups and religious orders. Although some facilities date to colonial times, most hospitals were founded in the early years of the 20th century. Non-profit organizations have a legally-mandated governance structure which is occupied by one or more “statutory executives” consisting of “board members” (*conelheiros*), “associates” (*socios*),

¹² The current patchwork of organizational arrangements found in the public hospitals has for the most part its origin in three waves of reform and corresponding legislation: (i) Administrative Reform of 1967, (Law 200/1967) which established indirect administration arrangements; As originally designed and implemented, indirect administration arrangements entailed full managerial autonomy; (ii) Constitutional reforms of 1988 including subsequent legislation governing civil service (Law 8112/1990), procurement (Law 8666/1993), and health system decentralization (Law 8080/1990), which subjected all publicly-owned and operated entities to the public labor, procurement and financial regimes; In effect, these reforms severely restricted the autonomy of public institutions under indirect administration; and (iii) administrative reforms implemented in the late 1990s (Constitutional Amendment of 1998), which resulted in the founding of “autonomous” organizational models such as Social Organizations, implemented through special state legislation.

“curators” (*curadores*) or “trustees” (*instituidores*). These are part-time, pro-bono positions, as mandated by law. Each organization determines the role and responsibilities of its statutory executives vis-à-vis facility management according to its by-laws, if they exist.

Although the division of responsibilities between statutory executives and management is legally established, oversight and management functions are merged for a significant number of facilities. Based on a survey of nearly 1,500 non-profit facilities, Barbosa et al. (2002) found that 40 percent lacked a management team, and are operated directly by statutory executives of the non-profit organization. Only about three percent reported outsourcing management. Autonomy of decision-making varies considerably by hospital size and function. As a general rule, smaller facilities (where a management team exists) have more limited autonomy while larger facilities enjoy greater decision-making authority. Formalized managerial practices such as monitoring systems, planning, auditing, performance review and human resource management are generally absent in small hospitals.

Policy Context: The policy environment for hospital reform is rapidly changing in Brazil. Several states and some municipalities are planning or implementing “social organization” models in newly constructed hospitals. Thus far, federal support for these initiatives has been timid in part due to concerns over challenges from employee associations. However, the federal government is developing plans to improve purchasing arrangements with private facilities through performance-based contracting.

COLOMBIA

Background: The Colombian hospital sector is comprised of public and private hospitals of diverse efficiency levels and management arrangements. Colombian hospital expenditures represent an 8.4 percent of the GDP and 37 percent¹³ of the total health care expenditure. In 2004, there were 1,368 hospitals¹⁴ in Colombia; 46 percent public and the remainder private. However, the public sector possessed 54 percent of the 55,463 beds.¹⁵

Governance and Organizational Arrangements: The decentralization process of the early nineties resulted in the transfer of first level or low complexity hospitals to the municipalities while higher complexity facilities became the responsibility of the Departments (or districts in the case of the capital city, Bogotá). Law 100 of 1993 ushered in a wave of far-reaching reforms which essentially transformed the Colombian health system. A key feature of the reform was the conversion of heretofore government—or social security—managed hospitals to autonomous organizations, known as State Social Enterprises (*Empresas Sociales del Estado* - ESE). By 2004, nearly all secondary and tertiary hospitals had been converted to ESEs. However, a significant number of small, first-level hospitals have yet to be converted to ESEs.

¹³ This is an underestimate due to lack of information on public spending in private and former ISS facilities.

¹⁴ Defined as a health facility with more than 10 beds.

¹⁵ Before the 1993 reform the largest public insurer, the Social Security Institute –ISS, public hospitals either belonged to the central government (Ministry of Health), to the decentralized health secretariats in departments (provinces), districts and municipalities, or to the ISS.

By law ESEs are governed by a board of directors and are granted considerable autonomy regarding the purchase of supplies (applying private law), selling services to third parties (including other providers) private patients, retention of non-budgetary revenues, capital investments, and to a lesser extent, service definition. They also have the authority to recruit and dismiss personnel. Non-ESE public hospitals, in contrast, have little decision-making authority regarding these functions, and are essentially budgetary organizations managed by municipal governments.

Public hospitals, including ESEs, derive their revenues from several sources and this can vary according to region and a facility's level of complexity. In the case of first level hospitals, on average half of their income comes from the sale of services to insurers, very important in the case of those in the Subsidized Regime - an insurance scheme for low-income Colombians. The other half comes from supply side subsidies, resources that are transferred from the central treasury to the departments, Districts and Municipalities.¹⁶

ESEs are subject to certain restrictions that condition their decision-making authority. First and foremost, boards and facility managers must follow cumbersome civil service rules regarding human resource management which severely limits their ability to set salaries as well as to evaluate, dismiss, promote or transfer employees. Collective bargaining agreements governing certain types of employees further curtail decision-making authority. Second, ESEs have a fixed term managing director appointed by the pertinent government authority (state, municipality or district) based on a list of three candidates selected in a competitive process by the facilities' Board of Directors.¹⁷ Third, retention of any "profits," e.g., earnings from non-budgetary sources that are in excess of their expenditures, requires governmental approval. Finally, Board composition consists of a mix of politicians (mayors and governors), political appointees as well as elected representatives of professional groups and user associations. Real independence from overall government may be insignificant. In fact, given the strong presence of government officials on the Board, a case can be made that personnel decisions remain in the hands of government.

Policy Context: Colombia continues its slow but steady march toward implementation of Law 100, and the conversion of public hospitals to ESEs. There are calls to place further restrictions on ESE ability to set prices and negotiate contracts with third parties.¹⁸ However, recent policy initiatives aim to expand options for ESE governance and management, including partnerships with the private sector.¹⁹ It also calls for modernizing the legal and regulatory framework for ESEs in part to grant them greater decision-making authority over human resources. One measure already under implementation in a significant number of public hospitals entails the gradual replacement of civil servants by personnel contracted through third-parties, outsourcing and direct contracting of professionals as independent consultants. An estimated 20 percent of

¹⁶ In principle, departments and districts should use the direct transfers from the central government to "purchase" health care services from hospitals to serve the population still not covered by insurance. In practice, these demand side subsidies have been unevenly implemented. In many cases, they still work as supply side subsidies, incorporated into both facility and local government budgets.

¹⁷ Non-ESE hospitals also have managing directors, but they are appointed directly by governors or mayors.

¹⁸ Congressional Bill 052, 2005.

¹⁹ National Policy for Health Service Provision, Nov. 2005.

personnel are now employed through these arrangements, expanding facilities' flexibility in human resource management.

MEXICO

Background: The Mexican hospital sector consists of about 3,830 facilities and slightly more than 100,000 beds. The public and social security system own and operate less than 30 percent of hospitals while the remainder consists mainly of for-profit, private facilities. The philanthropic sector represents less than 10 percent of facilities. Nevertheless, over 70 percent of beds are located in public and social security facilities. Though the private sector accounts for nearly three-fourths of facilities, it possesses less than 30 percent of beds. Private hospitals tend to be small facilities, containing less than 50 beds. Public and social security facilities tend to be larger.

The segmentation of the hospital sector parallels that of the overall health system. Public hospitals operated by federal and state authorities, representing about 14 percent of facilities and 30 percent of beds, mainly serve low-income, uninsured populations. The social security sector, consisting of several institutions and accounting for approximately 15 percent of facilities and 40 percent of beds, caters to insured groups, generally formal sector workers and civil servants, including families. As elsewhere, the private sector serves all income classes. The distribution of facilities and beds heavily favors populations covered by social security as well as Mexicans residing in large cities.

Governance and Organizational Arrangements: In recent years, the Federal Health Ministry (SSA) decentralized nearly all federal hospitals to the states. However, this policy has not resulted in granting greater managerial autonomy. The majority of public hospitals are managed centrally as budgetary arms of the institutions to which they belong. Oversight is norm-based, and managers generally have little decision-making authority. Little is known about governance arrangements in private hospitals.

Hospitals belonging to Mexican Social Security Institute (IMSS) have little or no autonomy. Nearly all input and financial management functions are managed centrally or by regional administrative units. Hospitals owned and operated by the states exercise a modicum of autonomy, usually limited to the purchase of supplies. However these facilities must comply with broader procurement legislation. Budgets are allocated on a historical basis to each hospital, allowing little margin for decision-making at the unit level. Public hospitals can sell services to the IMSS, private insurers and other public institutions, but there is little evidence about the extent of this practice. They also charge user fees and sell services to private patients applying sliding fee scales. Depending on state legislation, hospitals can retain all or part of non-budgetary revenues. Revenues from non-budgetary resources are minimal compared to income derived from institutional budgets.²⁰

²⁰ In 2002 the federal government established a national insurance system for low-income Mexicans, known as *Seguro Popular de Salud* (Popular Health Insurance). The insured receive care at public hospitals and are not subject to user fees. The insurance system pays a flat fee to the states, which in theory is transferred to the hospital via the budget.

Managers of state-managed hospitals are subject to state and federal government legislation regarding human resource management. In many cases, these functions are performed by the state bureaucracy. The exceptions are personnel contracted on a temporary basis (mainly administrative personnel) or contracted as independent professionals (mostly specialized nurses or medical personnel). These practices have become increasingly common throughout Mexico to avoid restrictions resulting from collective bargaining agreements. Both IMSS and the states are bound by collective bargaining agreements that are nationally negotiated with employee unions (National Health Care Workers Union and Social Security Workers' Union). These agreements further limit institutional decision-making on processes involving selection of permanent positions, dismissal, promotion, and inter-facility transfers.

Fourteen large specialty hospitals, referred to as Decentralized Public Organizations, are exceptions. These consist of a mix of “national institutes,” university hospitals and large federal hospitals located in Mexico City. The facilities have traditionally operated autonomously, possessing legal personality and governing boards. Though these facilities have greater autonomy in terms of procurement of supplies, they must follow public labor rules for permanent personnel.

Policy Context: Although there is interest in decentralizing decision rights to public hospitals, the main policy focus in Mexico has been decentralization to the states, and in the case of IMSS, to regional administrative units. Public authorities are currently concentrating their efforts on modernizing managerial practices and improving the skills of hospital managers. Any future shift to alternative governance arrangements through increased managerial autonomy will depend on the states.

5. IMPLICATIONS OF HOSPITAL GOVERNANCE RESEARCH FOR STUDY DESIGN AND VARIABLE DEFINITION

This study takes steps toward filling several of the methodological and knowledge gaps noted earlier. First, as described in greater detail below, this study's results are based on 397 responses to a survey instrument on hospital governance completed by the administrators of individual hospitals, providing sufficient observations for statistically valid analyses. This study does not, however, include data drawn directly from self-reports or observations of hospital board members. Similar to other studies involving an institutionally-directed survey instrument, we rely on a single source who, in all likelihood, is usually the hospital manager or a single contact or representative for the board.

Second, the survey gathered information about the functions of governance—who makes which decisions—and about hospital performance in addition to standard questions about governance structures. This study moves beyond simple structural items like board size and composition, which have been the primary focus of the literature on governance, but do not address the nature of governance and have little or no explanatory power. Instead, this study examines the *functions* of governance with a clear focus on how different authorities are distributed to different decision makers. According to Pointer and Orlikoff (1999), “*functioning* is the variable that has the single greatest impact on performance and contributions” of governing boards (p. 25).

Third, to identify types of hospital governance, we conducted a cluster analysis. Clusters were empirically derived based on four items from this study’s survey instrument: We examined the hospitals who responded to the survey in terms of: (a) the distribution of residual claims (government or private), (b) the structure of accountability mechanisms (institutional or autonomous), (c) the degree of market exposure, and (d) the allocation of decision making rights. The results of our cluster analyses revealed four types of hospitals for which Harding and Preker’s four labels appear to represent robust matches: *budgetary*, *autonomized*, *corporate* and *private*.²¹ Table 3 lists and defines these governance-related variables and names the corresponding elements from Harding and Preker.

Table 3: Approaches to Hospital Governance
(based on cluster analysis)

Grouping Variable	Definition	Reform Element^a
1. Public or Private Governance	Whether a hospital reported in the survey to be controlled by a public/governmental entity (Public) or a private/nongovernmental entity (Private)	Distribution of Residual Claims
2. Institutional or Autonomous Governance	Whether a hospital’s ultimate accountability rests with an institution above the hospital (Institutional) or with a hospital board or executive who is not accountable to any higher authority (Autonomous).	Structure of Accountability Mechanisms
3. Dependence on Budgeted Funding	Proportion of total revenues a hospital receives from budgeted sources versus fee-for-service, performance contracts, or other sources	Degree of Market Exposure
4. Director’s Authority	Count of seven core governance-level decisions (approve strategic plan, approve operations budget, add or eliminate services, grant physician privileges, assure quality, approve investments in facility and equipment, assure financial performance) for which the local hospital administrator has sole authority	Allocation of Decision Rights

^aHarding and Preker, 2003a

In response to the empirical realities encountered when examining governance types in both the public and private sectors, we apply the following definitions:²²

- “Corporate” are those hospitals that are privately, not publicly, controlled and are not autonomous, but are subunits of larger for-profit or not-for-profit organizations or conglomerates.²³
- “Private” refers to autonomous private hospitals that are not controlled by a larger for-profit or non-profit organization.
- “Budgetary” are public hospitals under hierarchical control of government.
- “Autonomized” refers to public facilities in which the ultimate authority rests in the hospital.

²¹ The empirical data are presented in Table 13.

²² Table 13 presents the results of the cluster analysis resulting in the definitions of these four governance types.

²³ Here we depart from the Harding and Preker schema in which only the “privatized” form is not governmentally controlled, and the “corporatized” form is governmental. In other words, the term “corporatized,” as used by Harding and Preker, refers to governmental institutions that have been “-ized” or changed in particular ways, but remain within the control of government. In our schema, a *corporate* facility is privately controlled. This reflects the fact that many *corporate* hospitals were not public to begin with and, so, are private, not “corporatized” or privatized from the public sector.

Finally, the study uses statistical methods to examine the associations between governance types and hospital performance, representing an advance over many writings on hospital governance. The performance measures used in this study include a battery of 19 ratings by hospital administrators of their own hospital's performance, as well as indicators of performance, including occupancy rate, costs per bed, nurses per bed, and licensed nurses as a proportion of total nurses. The four governance types were evaluated in this study with 25 measures of hospital performance. Table 4 describes each performance measure and defines how each measure was operationalized.²⁴

In sum, while we collected structural and demographic information about the governing bodies in the participating hospitals, we chose not to explore the structural features of organizational governance in this paper. This study adopts a functional perspective on governance and the potential benefit of different forms of governance by conducting an initial exploration of how governance-level authorities are allocated and how the allocation of authority is associated with hospital performance. Along with the evidence reviewed above, adopting a functional, rather than structural, view of governance has the added advantage of permitting comparisons and contrasts across various contexts, including between nations with sharply different health systems as in this study.

6. SURVEY METHODOLOGY

A survey was developed to examine governance practices in a sample of hospitals in Argentina, Brazil, Colombia, and Mexico.²⁵ This survey drew chiefly from the current literature on hospital governance. In addition, survey items on characteristics of governance were drawn in part by reviewing a hospital governance survey instrument by the American Hospital Association (AHA). Versions of the AHA instrument were used for US national surveys in 1989, 1997 and 2005 and have served as a major source of data for the limited body of research on governance in the United States. Finally, the items for describing characteristics of governance were supplemented by items on hospital performance in the areas of quality, administrative effectiveness, accountability, and fiscal efficiency. These reflect measures generally used in the hospital industry, including bed size, occupancy, staffing information, scope of services, and revenues and expenses.

Specifically, the twelve-page survey was designed to gather information in the following areas: (1) hospital characteristics, such as number of beds, staffing, and services; (2) financial and utilization information, such as the sources and amounts of revenue and total costs, admissions, outpatient visits, emergency visits, births, and occupancy; (3) the institutions, groups, or

²⁴ This study was, however, limited by the lack of standardization of hospital performance measures in Latin America. For example, the survey asked respondents to provide the hospital's bed rotation rate, but the wide variety of responses made it clear that the concept is not widely enough standardized to be responded to consistently. Admissions per bed were computed as a similar index of the productivity of bed usage. In addition, some common measures of hospital performance could not be used due to the context in which Latin American hospitals operate. For example, revenues across payer sources and expense information were gathered, and margin was computed, but given the nature and span of government budgeting, it was determined that margin would not be a suitable measure across the hospitals in the study.

²⁵ An in-country expert or institution was contracted in each participating nation to gather relevant literature from the participating nation, assist in survey design, and oversee the distribution and collection of surveys.

Table 4: Hospital Performance Indicators

Indicators	Operational Definition
Accountability Indicators	
Vigilance	<p>The proportion of 10 measures common to hospital management that are regularly reviewed by the governing entity and/or the hospital administrator:</p> <ul style="list-style-type: none"> • mortality rates • morbidity rates • unscheduled readmissions • community health measures • immunization coverage • financial performance • hospital utilization • plan for investing in facility and equipment • employee attitude surveys • patient satisfaction surveys
Governance effectiveness Planning processes Clarity of responsibilities Decision making processes Community relations Government relations Physician relations	Rating of own hospital ^a
Quality Indicators	
Proportion of licensed nurses	Licensed nurses divided by total nurses
Quality of clinical services Quality of specialty services Quality of outpatient services Quality of community services Ease of access to services Facility upkeep Equipment upkeep Availability of medicines Sufficiency of Auxiliary Services	Rating of own hospital ^a
Efficiency Indicators	
Nurses per bed Admissions per bed Admissions per employee Occupancy Total costs per bed Fiscal efficiency Administrative efficiency Quantity of services delivered	<p>Total of all nurses divided by total beds</p> <p>Inpatient admissions divided by total beds.</p> <p>Inpatient admissions divided by total employees</p> <p>The average proportion of beds occupied by inpatients^b</p> <p>Total costs divided by the total number of beds, converted from local currency to US\$</p> <p>Rating of own hospital^a</p> <p>Rating of own hospital^a</p> <p>Rating of own hospital^a</p>
<p>^a Survey respondents rated their own hospitals on a scale of 1 (Excellent) to 9 (Deficient).</p> <p>^b Patients staying in the hospital at least 24 hours.</p>	

individuals that have the ultimate authority over hospital decision making in general and in key areas for hospital decision making, such as financial oversight, budget approval, hiring and firing directors or chief executives, physician privileging, and quality oversight; (4) the values that are most important in the selection of decision makers; (5) 19 self-ratings of hospital performance across accountability, quality, and efficiency; (6) the individuals and/or institutions responsible

for reviewing certain specific performance data; (7) governance characteristics and, for those hospitals that have governing boards, board characteristics such as size, composition, terms and term limits, educational requirements, and compensation for board service; and (8) professional characteristics of the hospital chief executive, such as education and experience. Open-ended questions about areas for improvement in national health systems and in governance practices at each administrator's own hospital were also asked.

Both Spanish and Portuguese versions of the survey were developed. Each version underwent repeated reviews by in-country experts in the respective participating nations with the aim of ensuring that variations in terminology and phrasing consistently referred to the same concepts across nations, resulting in four versions, one for each nation. The same structure was maintained in all four versions, with items in the same order, except for a few differences in Brazil. The three Spanish language versions were nearly identical.²⁶

The survey was fielded between May 2002 and May 2003 by in-country consultants and institutions. Sampling was targeted to the largest hospitals in each country. Larger hospitals were targeted for several reasons. They have a larger budgetary impact and deliver services to more people. The larger hospitals were also expected to be more likely to respond to survey items using standard conceptions of hospital and management terms. Moreover, larger hospitals were expected to have a greater ability to serve as "opinion leaders" or "trend setters" in their respective nations. Results about these hospitals might better influence national policy as well as the practices of governance in other hospitals. Finally, data files were acquired, checked for quality, re-entered in some cases, and deemed acceptable by the summer of 2004.²⁷

Sampling goals for the study were established as 150 hospitals per nation and 600 total hospitals for the four-nation, Latin American region. These goals were specified to permit analyses within each country and analyses across all four nations with high statistical power for "small" to "medium" effect sizes.²⁸ Only regional results are reported here, aggregating hospitals by features of governance across the four nations.

7. RESULTS

The results are reported in three parts. The first consists of descriptive statistics on the facilities responding to the survey, including size, staffing, production, revenues and costs. The second section reports on organizational forms (public vs. private), the array of governing bodies overseeing the hospitals and the four governance types that emerged from the empirical analysis. The remainder of this section centers on linking governance types to performance. The

²⁶ A copy of the Colombian version of the survey instrument may be found in Annex 3.

²⁷ Data quality issues are discussed in Annex 1.

²⁸ Power analyses were conducted to determine the sampling for the study (Cohen, 1988, p. 258). The researchers set the threshold for Alpha at .05, and assumed 3 degrees of freedom for regional analyses and 1 degree of freedom for single country analyses. Under these assumptions, 196 observations per country (and thus 784 observations for the regional, "Latin American," analyses) were estimated to be ideal for the detection of "small" effect sizes, with "medium" effect sizes estimated to be detectable with only 87 observations in a given country (and thus 348 total observations). In the end, in-country experts were contracted in an effort to achieve a minimum sampling goal of 150 hospitals per nation and an optimal goal of 200 hospitals per nation.

governance-performance relationship is analyzed along three dimensions: (i) performance ratings by hospital managers; (ii) performance indicators; and (iii) leadership characteristics.

7.1 SURVEY RESPONSES

Table 5 shows both the survey response and completion rates compared to the contracted minimum sampling goal of 150 hospitals per nation. The surveying process achieved the minimum contractual goal only in Colombia. However, it should be noted that pre-sampling power analyses had shown that the study would meet high standards for power for “medium” effect sizes (roughly comparable to a correlation of .30) if only 87 hospitals responded in each country. Only the sampling process in Argentina failed to achieve required response levels. Readers should keep this mind when considering the relevance of these analyses to Argentine hospitals only.

Tables 6 through 13 present descriptive information about the hospitals from each country that responded to the survey. These descriptive tables provide comparative background information on the hospitals and, due to the study’s deliberately biased sampling approach, are not intended to describe all the hospitals in each nation. Table 6, for example, presents hospital facility statistics, showing that the mean bed size of the responding hospitals was highest in Argentina (303.8) and lowest in Colombia (129.3). The hospitals responding from Mexico averaged more surgery suites (8.8) while the Colombian respondents averaged half as many. Although the survey sought to target larger hospitals, 10 percent (forty facilities) of the respondents had fewer than fifty beds.

Table 7 presents hospital volume statistics by country. As might be expected from the bed size differences in Table 6, the hospitals responding from Argentina, Brazil, and Mexico reported higher volumes of services than those in Colombia. This may partly be a reflection of the greater success in meeting sampling goals in Colombia; the local experts managing the surveying process in Colombia may have produced a smaller average hospital size as a result of more aggressive and more expansive survey distribution methods.

Table 5: Survey Response Rates and Completion Rates

Nation	Sample	Completed Surveys	Survey Response Rate	Completion Rate Compared to Goal of 150
Argentina	259	35	13.5%	23.3%
Brazil	399	102	25.6%	68.0%
Colombia	248	152	61.3%	101.3%
México	200	108	54.0%	72.0%
Region	1,106	397	35.9%	66.2%

Table 6: Hospital Facility Statistics by Country, 2001

Nation	N (Hospitals)	Minimum	Maximum	Mean
Bed Size				
Argentina	34	102	1,600	303.8
México	105	19	1,170	277.3
Brazil	100	52	845	262.7
Colombia	142	3	810	129.3
Surgery Suites				
México	94	1	70	8.8
Brazil	102	0	25	6.1
Argentina	34	0	19	6.0
Colombia	145	0	22	4.4

Table 7: Hospital Volume Statistics by Country, 2001

	N (Hospitals)	Minimum	Maximum	Mean
Inpatient Admissions^a				
Brazil	97	143	214,201	11,644.6
México	102	50	40,329	9,926.4
Argentina	32	1,354	20,108	8,681.7
Colombia	121	18	60,421	7,386.1
Births				
México	68	4	18,181	4,597.2
Brazil	67	1	29,509	2,423.4
Argentina	25	291	9,957	1,877.0
Colombia	105	1	11,400	1,570.1
Emergency Department Visits				
Brazil	80	83	551,301	85,970.9
Argentina	31	710	159,837	48,494.4
Mexico	98	120	290,006	44,599.3
Colombia	128	50	262,576	27,772.6
Outpatient Visits				
Mexico	94	95	641,889	127,599.0
Brazil	88	55	609,682	94,406.6
Argentina	11	6,326	95,000	49,368.9
Colombia	109	262	300,700	39,021.9
Occupancy Rate				
Mexico	99	13.4%	112.2%	79.6%
Brazil	90	15.4%	120.0%	74.9%
Argentina	34	40.0%	119.4%	72.9%
Colombia	130	15.1%	107.9%	70.6%
^a Inpatient admissions are defined as those patients remaining in the hospital for more than 24 hours.				

Table 8 presents staffing statistics among the hospitals that responded to the survey. Note that the Brazilian survey instrument excluded a data category for unlicensed nurses because of last-minute changes implemented in Brazil. The Brazilian category for nursing assistants appears to include large numbers of bedside clinical staff persons who have fewer years of formal education and would be called unlicensed nurses in the other countries. Colombia's respondents reported leaner staffing per hospital than the other countries analyzed in this report.²⁹ Mexico and Brazil

²⁹Again, however, it should be kept in mind that the responding hospitals from Colombia tended to have fewer beds and lower volume on average.

have nearly three times the number of physicians in hospitals on average than Colombia does. Argentine hospitals have the most physicians on average.

Table 9 gives the responding hospitals' average annual revenue in US currency by country.³⁰ Table 10 shows the average annual cost per bed of the responding hospitals in US dollars by country. This measure gives an indication of efficiency because it standardizes the costs of operating a hospital by the number of beds in each hospital. The Mexican hospitals reported the highest costs per bed while the Brazilian hospitals appear to be the least costly. The average cost per bed of the hospitals in Colombia and Argentina was very near the regional average of \$63,898.

Table 8: Hospital Staffing Statistics by Country, 2001

	N (Hospitals)	Minimum	Maximum	Mean
<i>Nursing Assistants</i>				
Brazil	94	6	1,144	252.3
México	104	2	659	129.6
Argentina	35	16	306	110.8
Colombia	142	2	725	101.4
<i>Unlicensed Nurses</i>				
México	98	4	994	198.0
Argentina	34	2	358	88.2
Colombia	33	1	243	23.0
Brazil	** Not Reported **			
<i>Licensed Nurses</i>				
México	97	1	562	60.9
Brazil	96	1	282	46.8
Colombia	134	1	356	28.6
Argentina	33	1	150	17.4
<i>Physicians</i>				
Argentina	34	25	962	253.3
México	103	10	875	182.1
Brazil	98	3	1,079	180.2
Colombia	140	2	508	62.9
<i>Employees</i>				
Argentina	35	150	2,561	740.9
Brazil	98	9	4,713	855.6
Colombia	143	1	2,217	338.0
Mexico	101	90	6,341	1,206.5

³⁰ For each nation, a blended exchange rate of its currency relative to the US dollar was computed by averaging the rate on January 1, 2002 with the rate on December 31, 2002. This was done to reflect the year for which data were requested and to accommodate the facts that (1) hospitals might have different fiscal years, (2) surveying and data collection processes spread throughout the following calendar year, and (3) modest fluctuations in exchange rates did occur.

Country	Exch Rate 01/01/01	Exch Rate 12/31/01	Blended Rate
Argentina	1.00157	1.00604	1.003805
Brazil	.51256	.41558	.46407
Colombia	.0004464	.0004215	.00043395
Mexico	.10362	.10885	.106235

Table 9: Revenue in US\$ by Country, 2001

	N (Hospitals)	Minimum	Maximum	Mean
Argentina	30	240,948	95,826,592	17,893,658
Brazil	93	2,422	192,356,652	11,646,197
Colombia	125	0	60,019,062	8,730,627
Mexico	88	40,471	126,940,931	29,316,282
Regional	336	0	192,356,652	15,747,224

Table 10: Cost Per Bed in US\$ by Country, 2001

	N (Hospitals)	Minimum	Maximum	Mean
Argentina	25	2,478	225,808	63,498
Brazil	82	754	266,806	36,509
Colômbia	109	3,966	417,824	63,716
México	73	238	230,380	95,072
Regional	289	238	417,824	63,898

7.2 ORGANIZATIONAL FORMS AND GOVERNANCE TYPES

This subsection presents the survey findings for several organizational and decision-making dimensions related to governance. It focuses on the outcomes of a cluster analysis, resulting in the definition of four governance types.³¹ The cluster analysis was based on the following grouping variables presented earlier in Table 3: organization form (public vs. private), locus of governance authority [institutional vs. autonomous], degree of budgetary dependence and facility director's decision-making authority.

Organizational Forms

Table 11 describes the distribution of legal organizational forms of responding hospitals. Overall, over half (52 percent) of the hospitals were public hospitals, keeping in mind that the overall distribution of hospitals by organizational form differs in the four countries. Approximately 89 percent of Mexico's and slightly over two thirds (68 percent) of Argentina's responding hospitals were public. Meanwhile, private organizational forms dominated in Brazil and Colombia with about two-thirds of Brazil's and 69 percent of Colombia's hospitals being private.³²

Table 11: Legal Organizational Forms by Country, 2001-2002

Org. Form	Argentina	Brazil	Colombia	México	Total
Public	24	37	47	96	204
Private	11	64	105	12	192
Total	35	101	152	108	396

Given this study's emphasis on the functions of governance, rather than on structural features of governance, it is important to understand how respondents were asked the critical question: "Who governs?" Respondents were given 10 choices in response to the operational version of

³¹The governance types form the basis of the performance analysis reported in the next subsection.

³² Note that the statistics being presented reflect all the hospitals that responded to this study's survey and do not necessarily reflect the typical hospital in these four countries.

this question. Box 4 describes how this study made operational the question of who holds the governing authority.

**Box 4: Operationalizing the Locus of Governance
(survey question on decision-making authority)**

Who is the highest authority over the hospital (that is, higher than all others and not needing permission of any other individual, group, or department of government to make decisions on behalf of the hospital?) (Mark the single best response)

- a. A private company or system
- b. A church or religious entity
- c. A foundation or non-religious charitable organization
- d. A university or college
- e. A department or secretariat of a municipal government
- f. A department or secretariat of a department of state or provincial government
- g. A ministry or secretariat of the federal or central government
- h. A social security institute
- i. A board or executive committee of the hospital that is autonomous, has ultimate authority, and does not have to ask permission from any other individual, group, or department of government to make decisions on behalf of the hospital
- j. Other

As an illustration, a hospital may be public or private and yet be governed through any number of different approaches. A single government agency may have ultimate authority over decision making for the hospital, or it might be a small council among the leadership of a not-for-profit religious organization, or it might be a board of individuals who are appointed or elected for this purpose. Based on our earlier discussion, we assume that, for any given function of a hospital, governance is carried out by those who hold the *ultimate authority for decision making for the hospital*, and is characterized by what this individual, group, or institution does with this authority.

Table 12 reveals that autonomous governing bodies—as distinct from institutional forms of governance in which the ultimate authority for decision making for the hospital rests with a high level entity, such as a government agency, a national charitable organization, or a parent corporation—represented the largest number of responding hospitals at 130 or 34 percent. This means that about one-third of the respondents selected choice “i,” (of Box 3) identifying an autonomous governing body as that group with the ultimate authority and indicating that no individual, group, or governmental agency holds authority above it for decisions about the hospital. This distinction between the form of legal organization and the exercise of ultimate authority is of great importance because the former reflects the type of ownership while the latter reflects the level of organization (system or agency vis-à-vis local hospital) exercising day-to-day authority over decisions for the hospital.

Autonomous boards may operate in the framework of more centralized entities, such as government agencies, religious organizations, or others; however, they represent a distinct approach to governance in that they are not ultimately driven by the mission, goals, rules, or procedures of a central authority that oversees more—often much more—than a given hospital. Autonomous boards, at least theoretically, are driven by their respective authority for the hospital

in its particular market with its distinctive problems and opportunities for revenue growth, cost control, contractual arrangements, community service, marketing, and fundraising. Autonomous boards represent, therefore, an expression of decentralized authority within which the hospital's decision makers exercise their own authority for the hospital, allowing for the fact that hospital behavior may often be guided by regulations and laws that presumably apply more or less equally across hospitals. Among more centralized approaches to governance, the largest single group across countries was composed of organizations run under social security agencies, representing 16 percent of all respondents. This form exists predominantly in Mexico, but also in Colombia. Among their other responsibilities, state and provincial governments governed approximately 13 percent of respondents with significant representation in Argentina, Brazil, and Colombia. Governance by state and provincial governments was followed in frequency by private corporations (8 percent), religious organizations (8 percent), charities (7 percent), federal government (4 percent), municipal government (4 percent), and a university or college (3 percent). Taken together and including social security institutes in Mexico and Colombia, hospitals governed by government institutions accounted for 37 percent of the responding hospitals.

Table 12: Types of Ultimate Governing Authorities by Country, 2001

Governance Authority	Argentina	Brazil	Colombia	Mexico	Total
Autonomous Board	7	12	92	19	130
Social Security Institute	0	0	9	51	60
State/Provincial	11	18	1	22	52
Private Corporation	2	10	20	0	32
Religious Organization	1	15	12	3	31
Charity Not Religious	1	23	2	0	26
Federal Government	4	3	3	7	17
Other Form	2	2	9	2	15
Municipal Government	5	8	0	1	14
University or College	1	7	2	0	10
Total	34	98	150	105	387

Governance Types

Table 13 displays the results of our cluster analyses, revealing four governance types which matched well with the Harding and Preker schema: budgetary, autonomized, corporate and private. As previously mentioned, for our analysis, “corporate” are private hospitals.³³ As shown in Table 13, 117 of the 286 hospitals were identified by the cluster analysis as budgetary hospitals. Hospitals of the budgetary type were governed as subunits of governmental (public) institutions and received an average of 65 percent of their revenue from governmental budgets. Their local hospital administrator's held the sole authority to make an average of 2.5 of the seven core governance-level decisions.³⁴ The 45 hospitals labeled here as autonomized were also public, but were autonomous; that is, they were controlled by an ultimate governing authority that is specific to one hospital—such as a hospital governing board—rather than being governed

³³ See Section 5.

³⁴ See notes for Table 13. Overall ANVOVA was significant (e.g., across all governance types) for “revenue from budgetary sources” ($p = .021$) and for “director's authorities” ($p = .001$). However, between group differences for budgetary and autonomous types were significant for “revenues from budgetary sources” but not significant for “director's authorities.”

by a subunit of a larger institution (it’s important to remember that a hospital may be part of a larger governmental unit but, in practice, be governed by decisions made by an authority that is specific to the hospital rather than the larger governmental unit). Autonomized hospitals received 39 percent of their revenue from governmental budgets, and their directors held an average of 2.7 of the 7 common authorities. We can assume that other decision rights were held elsewhere in government or by a board or other decision making body.

Table 13: Cluster Analysis Describing Four Types of Governance

Governance Type	N	Public or Private	Institutional or Autonomous	Budgetary Dependence ^{a,b}	Director’s Authority ^{c,d}
Budgetary	117	Public	Institutional	65.0%	2.51
Autonomized	45	Public	Autonomous	38.8%	2.67
Corporate	78	Private	Institutional	7.7%	3.45
Private	46	Private	Autonomous	4.9%	3.07
Total	286 ^e	--	--	35.6%	2.88

^aBudgetary Dependence: the proportion of the hospital’s revenue that comes from budgeted sources.
^bThe overall ANOVA is significant ($p < .001$) and all post-hoc comparisons between pairs are significant, except that Private and Corporate.
^cDirector’s Authority: the count of seven decision rights or authorities that a local hospital administrator may be authorized to make in public or private hospitals (approving the strategic plan, approving the operations budget, adding or eliminating services, granting physician privileges, assuring service quality, approving investments in facility and equipment, and assuring financial performance).
^dThe overall ANOVA is significant ($p = .021$), but only post-hoc comparison that is significant is the comparison between corporate and budgetary types ($p = .003$).
^eIncludes only hospitals with >50 beds and contained all variables used in cluster analysis.

Two types of private hospitals also emerged from the cluster analysis. The hospitals labeled as corporate hospitals here were privately governed and were subunits of larger institutions, such as for-profit or not-for-profit multi-hospital systems. These 78 corporate hospitals reported receiving about 8 percent of their revenue from governmental budgets. Their directors or chief executives were authorized to make more decisions than the two public types—an average of 3.5 of the seven core decisions. Meanwhile, 46 hospitals were identified as private and autonomous of institutional control. These private hospitals received less than five percent of their revenue from government budgets and their directors reported making three of the seven core governance-level decisions. In the latter case, it is likely that the directors shared some governance-level decision-making authority with a Board. Nevertheless, the difference between scores of director’s authority was not found to be significantly different.³⁵

7.3 GOVERNANCE TYPES AND PERFORMANCE

In this section the performance of the four governance types are compared to each other in five ways: (i) hospital administrators’ ratings of their own hospital’s performance in 19 areas; and (ii) seven common hospital performance indicators. Also, to help add clarity to the nature of these governance types and to better understand their performance differences, three analyses examined characteristics of leadership under the four governance types: (iii) hospital leadership use of information to evaluate hospital performance; (iv) hospital administrators’ ratings of the importance of 19 criteria for selecting top-level hospital decision makers; and (v) professional

³⁵ Between group differences for corporate and private types were significant for “director’s authorities” ($p=.003$), but not significant for “revenues from budgetary sources.”

and educational characteristics of hospital administrators.³⁶ Certain methodological modifications applied to the sample to improve statistical accuracy of the analyses are also explained.

Note that none of the analyses in this study is intended to make firm conclusions about a causal relationship between governance types and performance or any of the other variables by which the governance types are compared. The study design and available data limit the study's conclusions to identifying and interpreting associations between governance types and other variables. Nevertheless, when combined with evidence elsewhere³⁷ showing that hospitals under facility-based management perform better, the findings presented in this subsection are suggestive of a strong association.

Finally, given differences in the distribution of hospital size, spending and complexity across the sample as well as country characteristics, we can speculate that the associations described in the section between governance types and performance may be spurious. In other words, the observed performance differences reported below may be due to differences among these variables, rather than the governance types themselves. We performed multivariate analyses that controlled for these potentially confounding variables. As described in Annex 2, the analyses found that the association between the governance types and performance variables were independent of the effects of such confounding variables.

Special Methodological Considerations

To improve the statistical accuracy and validity of comparisons between governance types, same-sized samples of 44 observations were randomly drawn from hospitals in each governance type.³⁸ The distribution of these four governance types among the responding hospitals and across the four nations examined is presented in Table 14. The Mexican and Argentine respondents contain more hospitals reflecting the budgetary type, Brazil most heavily reflects the corporate type, and the autonomized and private types are more common in Colombia.

Table 15 below provides descriptive data comparing the four hospital governance types in terms of seven hospital-size, volume, and service-mix indicators. Budgetary hospitals were largest and had the highest outpatient volume, averaging 277 beds, 178 physicians, and an average of over 102,000 outpatient consultations each. The private hospitals were the smallest at 183.6 beds, 100 physicians, 7,848 admissions, and 43,533 outpatient consultations on average. Private hospitals also had the broadest array of more intensive services. Autonomized hospitals had the highest inpatient volumes, with the most surgery suites, the largest number of admissions on average, and the largest average number of employees.

On the other hand, the scope of the intensive services at autonomized hospitals was not as broad as any of the other groups. This combination of high inpatient volume and lower scope of

³⁶ The four governance types were compared using several different types of analysis, depending on the nature of the specific analysis. These are explained in the notes to each data table.

³⁷ See discussion in Section 3.

³⁸ This step reduces measurement error due to variations in sample parameters such as sample size and distribution normalcy.

intensive services suggests that the autonomized hospitals in the sample were more likely to have a focus in a smaller number of high intensity services. Corporate hospitals represented, for virtually all these indicators, a mid-point between their private counterparts—the Private hospitals—and the government types.

Table 14: Distribution of Sampled Governance Types by Country

Country	Budgetary	Autonomized	Corporate	Private	Total
Argentina	8	2	2	2	14
Brazil	6	0	25	10	41
Colombia	7	26	14	30	77
Mexico	23	16	3	2	44
Total	44	44	44	44	176

Table 15: Averages of Descriptive Characteristics by Governance Type

Characteristic	Budgetary	Autonomized	Corporate	Private
Total Beds	277.3	253.3	219.9	183.6
Surgery Suites	7.33	7.97	6.44	6.23
Scope of Intensive Services ^a	2.52	2.11	2.59	2.68
Physicians	178.4	164.7	131.7	100.5
Employees	982.6	1,049.7	572.4	494.1
Admissions	10,594	11,714	8,853	7,848
Outpatient Consultations	102,607	88,453	51,995	43,533

^aScope of Intensive Services = the count of four more intensive services (cardiology, neurology, oncology, endocrinology) provided by the hospital. This index correlated very strongly with the proportion of 16 different specialties that might be offered by a hospital (Pearson $r = .906$).

Performance Self-ratings

Table 16 presents the results of ANOVA comparing the governance types in 19 performance areas based on hospital administrators' ratings of their own hospitals. These ratings were on a 9-point scale where 1 = "excellent" and 9 = "deficient." The middle point, 5, was labeled "regular." In Table 16 results are ranked in order of the total column, from the area of least overall rated excellence across governance types—facility upkeep—to the area of highest overall rated excellence—the quality of specialty services. As shown in the final row—average rating—administrators of budgetary hospitals rated their organizations lower (mean = 3.06), followed in order by the autonomous ($m = 2.61$), corporate ($m = 2.48$), and private ($m = 2.24$) types whose administrators rated their hospitals higher across performance areas.

Main effects for each performance area were evaluated with F tests. Significant differences ($P \leq .05$) across governance types were found in nine of the 19 comparisons.

- Facility upkeep
- Equipment upkeep
- Availability of medicines
- Sufficiency of auxiliary services
- Decision making processes
- Ease of access to services
- Government relations
- Quality of clinical services
- Physician relations

Table 16: Self-Rated Performance by Governance Types^a

Performance Area	Budgetary	Autonomous	Corporate	Private	Total	F	P ^b	Post Hoc Tests ^{c,d}
Facility upkeep	4.12	3.64	2.60	2.40	3.19	9.066	.000	CB,PB,CA,PA
Quality of community services	3.44	2.80	3.00	3.28	3.13	.785	ns	
Equipment upkeep	4.10	3.76	2.53	2.12	3.11	15.064	.000	CB,PB,CA,PA
Planning processes	3.40	2.90	2.86	2.67	2.96	1.509	ns	
Fiscal efficiency	2.68	3.27	2.83	2.71	2.87	.948	ns	
Availability of medicines	3.98	3.48	2.02	1.72	2.78	17.502	.000	CB,PB,CA,PA
Sufficiency of auxiliary services	3.67	2.93	2.53	2.02	2.78	8.817	.000	CB,PB,PA
Clarity of responsibilities	3.09	2.48	2.63	2.53	2.68	1.516	ns	
Decision making processes	3.26	2.40	2.53	2.47	2.66	3.224	.024	
Quality of outpatient services	2.70	2.31	2.97	2.24	2.55	2.175	ns	AC, PC
Community relations	2.92	2.31	2.38	2.47	2.52	1.172	ns	
Ease of access to services	2.91	2.44	2.36	2.05	2.44	2.903	.037	PB
Government relations	2.60	1.80	3.00	2.18	2.41	4.935	.003	AB,AC
Administrative efficiency	2.71	2.55	2.12	2.10	2.36	2.577	ns	
Governance effectiveness	2.71	2.33	2.14	2.26	2.36	1.738	ns	
Quantity of services delivered	2.48	2.08	2.12	2.08	2.19	.813	ns	
Quality of clinical services	2.57	2.07	2.14	1.76	2.14	3.027	.031	PB
Physician relations	2.52	1.88	2.26	1.88	2.14	2.670	.049	
Quality of specialty services	2.34	2.10	2.05	1.65	2.04	2.279	ns	PB
Average Rating	3.06	2.61	2.48	2.24	2.60	--	--	--

^a Presented are the results of Analysis of Variance using SPSS 11.5 ANOVA procedure to compare the means of ratings by each hospital's administrator of his or her own hospital's performance in 19 areas of performance, using Tukey's Honestly Significant Difference (for equal variances) and Tamhane's T2 (where equal variances cannot be assumed). The ratings were on a nine-point Likert-type scale where 1 = excellent, 5 = regular, and 9 = deficient. The initial analyses for these Likert-type items were conducted using Kruskal-Wallis procedure to test main effects and Mann-Whitney U comparisons between governance types. ANOVA results were identical to those achieved with these non-parametric procedures. Since ANOVA is familiar to more readers, is more easily interpreted, and provides a consistent format for presenting these results along with results from comparisons of the ratio-level variables included in the performance analyses, ANOVA results are presented throughout except where nominal-level variables are in play.

^b This column reports the significance levels ($p < .05$) for the main effects comparing all four governance types. The main effects measure systematic, non-random variation with all four types considered together.

^c Post hoc test compared governance types one at a time, but only showing pairs where $p < .05$. Each pair of letters identifies a significant difference between two of the four governance types, which are represented by B (budgetary), A (autonomized unit), C (corporate unit), and P (private unit), and shows the direction of the difference. For example, the letter pair PB indicates that hospitals with the private-governance type were rated significantly higher in performance than the budgetary-governance types.

^d It is important to note that for some performance areas the main effects (reported in the penultimate column) were significant, but none of the post-hoc contrasts were. This would indicate significant variation across all four types, but not significant differences between any two pairs. Contrarily, for other performance areas, the main effects were not significant, but some of the post-hoc contrasts were found to be significant and are reported.

The far right column of Table 16 shows significant differences ($P \leq .05$) between pairs of governance types based on post-hoc comparisons (defined below). Each pair of letters identifies a significant difference between two of the four governance types, which are represented by B (budgetary), A (autonomized unit), C (corporate unit), and P (private unit) and shows the direction of the difference. The governance type that was rated as having better performance by administrators of that type of hospital is shown first. For example, the letter pair PB in the row for Facility Upkeep indicates that hospitals with the private-governance type were rated significantly higher in performance than the budgetary-governance types.

The private governance types—corporate and private—were associated with better hospital performance in a number of performance areas, mostly related to quality issues plus administrative efficiency. The autonomized public hospitals were rated as having somewhat fewer deficiencies than the budgetary hospitals. The one exception to better performance ratings for the private governance types was in the area of government relations where the autonomized hospitals were rated as superior to the budgetary and corporate types. In no instance were private hospitals rated significantly lower than another governance type.

The results present both main effects and the results of post-hoc tests comparing each of the four governance types to each other. *Post hoc contrasts* were also conducted to discern the relative influence of (a) the distribution of residual claims (public versus private) and (b) the structure of accountability mechanisms (institutional versus autonomous). The contrasts compare two types together against two other types together. In other words, the post-hoc contrasts show whether significant differences between governance types might be attributed to their governmental or private governing control *or* to their autonomous or institutional governance mechanism. Table 17 shows statistically significant contrasts between the governmental (budgetary and autonomized combined) and private (corporate and private combined) hospital governance types.

Table 18 shows post hoc contrasts between the autonomous (autonomized and private combined) and institutional (budgetary and corporate combined) governance types. These contrasts provide help in interpreting the differences found between the four governance types. The private types were rated higher than the government types in areas related to fixed assets, the availability of medicines and auxiliary services, administrative efficiency, as well as ease of access to services. Autonomy, meanwhile, was associated with advantages in relations with powerful stakeholders (government and physicians), clinical quality, and the processes of decision making. In general, privately and autonomously controlled hospitals—the private type in our schema—would appear to enjoy performance advantages over other governance types while governmentally and institutionally controlled hospitals—the budgetary type—appear to face performance disadvantages.

Table 17: Self-Rated Performance Contrasts of Private v. Public Types^a

Performance Area	Model Contrasts and Results	t	Sig.
Availability of medicines	Private types higher than Public types	7.02	.000
Equipment upkeep	Private types higher than Public types	6.48	.000
Facility upkeep	Private types higher than Public types	5.03	.000
Sufficiency of auxiliary services	Private types higher than Public types	4.35	.000
Administrative efficiency	Private types higher than Public types	2.71	.008
Ease of access	Private types higher than Public types	2.24	.027

^a Private “types” refer to the combination of corporate and private governance types. Public “types” refer to the combination of budgetary and autonomized governance types.

Table 18: Self-Rated Performance Contrasts of Autonomous v. Institutional Types^a

Performance Area	Model Contrasts and Results	t	Sig.
Government relations	Autonomous types higher than Institutional types	3.50	.001
Physician relations	Autonomous types higher than Institutional types	2.67	.008
Quality of outpatient services	Autonomous types higher than Institutional types	2.48	.016
Quality of clinical services	Autonomous types higher than Institutional types	2.28	.024
Decision making processes	Autonomous types higher than Institutional types	2.08	.040
Autonomous “types” refer to the combination of autonomized and private governance types. Institutional “types” refer to the combination of budgetary and corporate governance types.			

Hospital Performance Indicators

As shown in Table 19, the four governance types were also compared to each other in terms of their association with seven indicators of hospital performance: nurses per bed, admissions per employee, occupancy rates, admissions per bed, costs per bed, licensed nurses, and a variable labeled “vigilance.” Vigilance is an index of the proportion of 10 measures of hospital performance that were reported to be regularly reviewed by the governing entity or hospital management.³⁹ The performance areas are ordered according to the column presenting the F scores.

Autonomized hospitals had significantly higher admissions per bed than budgetary hospitals and higher occupancy rates when compared to corporate and private hospitals. Hospitals with private governance models had significantly more admissions per employee and admissions per bed than budgetary hospitals, and more nurses per bed than hospitals with autonomized governance. Corporate hospitals had more admissions per employee and nurses per bed, a higher percentage of “licensed”⁴⁰ nurses than budgetary hospitals, and more nurses per bed than hospitals with autonomized or private governance.

Tables 20 and 21 present the significant results from *contrasts* between the private and public and the autonomous and institutional types of governance respectively. The public types have higher occupancy rates while the private types have more nurses per bed, more admissions per employee, and a higher proportion of licensed nurses than the public types. Autonomous governance is also associated with more nurses per bed and more admissions per bed.

In general, comparing the governance types using these seven hospital performance indicators substantiates the results found when using managers’ self-ratings of their own hospitals. Among these Latin American hospitals, private governance is associated with more admissions per employee and fewer nurses per bed. These results indicate efficient use of the hospital’s capacity adjusted for labor. The higher proportion of licensed nurses at private hospitals suggests higher technical quality. Meanwhile, the public hospital had a higher occupancy rate. Autonomously governed hospitals had fewer nurses and more admissions per bed than institutionally governed hospitals. Private and autonomous governance is associated with more desirable performance.

³⁹ See Table 4 for the 10 measures included in this composite variable.

⁴⁰ “Licensed” nurses in Latin America have a *licenciatura*, a level of achievement in formal education.

Table 19: Hospital Performance Indicators by Governance Types^a

Performance Area	Budgetary	Autonomous	Corporate	Private	Total	F	P	Post Hoc Tests ^b
Nurses per Bed	1.08	.86	2.32	1.53	1.45	8.851	.000	CA,CB,
Admissions per Employee	12.57	16.62	20.80	21.52	17.87	3.242	.024	CB, PB
Occupancy Rate	75.85	81.59	74.08	72.35	76.05	2.538	ns	AC, AP
Admissions per Bed	38.22	50.37	43.60	50.09	45.50	2.082	ns	AB, PB
Costs per bed US\$	\$58,894	\$78,873	\$55,178	\$56,623	62188	1.700	ns	
Licensed Nurses (%)	11.8%	14.8%	18.6%	17.1%	15.7%	1.559	ns	CB
Vigilance ^c (%)	95.7%	95.2%	91.6%	94.6%	94.3%	1.229	ns	

^a Analysis of Variance used SPSS 11.5 ANOVA procedure to compare the means of seven common indicators of hospital performance. Significance testing relied on Tukey's Honestly Significant Difference (where equal variances are assumed) and Tamhane's T2 (where equal variances cannot be assumed).

^b Post hoc test compared governance types one at a time, showing pairs where $p < .05$. Each pair of letters identifies a significant difference between two of the four governance types, which are represented by B (budgetary), A (autonomized unit), C (corporate unit), and P (private unit), and shows the direction of the difference. For example, the letter pair PB indicates that hospitals with the private-governance type were rated significantly higher in performance than the budgetary-governance types.

^c Vigilance is computed as the proportion of 10 measures common to hospital management that *are* regularly reviewed by the governing entity and/or the hospital administrator. (See Table 4 for more details).

Table 20: Hospital Performance Contrasts of Private v. Public Types

Performance Area	Model Contrasts and Results	t	Sig.
Nurses per Bed	Private types higher than Public	4.42	.000
Admissions per Employee	Private types higher than Public	2.84	.005
Occupancy Rate	Public types higher than Private	2.16	.032
Licensed Nurses (%)	Private types higher than Public	1.96	.050

Table 21: Hospital Performance Contrasts of Autonomous v. Institutional Types

Performance Area	Model Contrasts and Results	t	Sig.
Nurses per Bed	Autonomous types higher than Institutional	2.36	.020
Admissions per Bed	Autonomous types higher than Institutional	2.29	.023

Leadership Characteristics

To add specificity to the performance differences between the four types of governance, and perhaps uncover some explanations for those differences, this section compares the governance types in terms of three kinds of leadership characteristics. How leadership of an organization assesses the organization's performance may offer a glimpse into why performance differences exist. Table 22 presents the percentage of each governance type in which the hospital's leadership regularly compared hospital performance to some form of baseline measurement. Identifying and/or establishing baselines measures, such as from state or national data sources, in order to compare hospital performance against those baselines affords leadership the opportunity to identify performance targets and progress toward those targets. At a minimum, leadership that takes the time and effort to measure performance against standards of measurement demonstrates a greater interest, for whatever reason, in the areas they are tracking.

Table 22 reveals that more of the leadership teams of hospitals governed by a budgetary model examine their hospitals' performance against baseline standards in all three of the performance

domains examined: community health outcomes, clinical outcomes, and financial outcomes. At first glance, this may seem contrary to this study’s results on how performance associates with governance types; the corporate and private governance models seemed to be associated with performance advantages, but are consistently lower in the use of baseline standards compare hospital performance. Possible explanations include the following: (1) investing greater effort in measuring performance is not necessarily associated with better performance; (2) being compelled to focus on performance in all three of these major domains diffuses leadership’s available energy for improving performance across all three areas, whereas the leadership of most corporate and private hospitals gives less attention to community health outcomes and focuses more consistently on financial outcomes; (3) public, and especially Budgetary, hospitals may be held accountable for a broader set of performance targets and, as a consequence, face more difficult challenges in achieving excellence in any performance domain.

Table 23 shows how the governance types compare in terms of the criteria used for selecting the individual(s) who hold the governance-level authority for the organization, as reported by hospital administrators. The criteria are ordered according to the average scores, presented in the “total” column, according to a five-point Likert-type scale (1=essential and 5=not important). Differences in these selection criteria reflect, minimally, differences in the leadership philosophy of those who lead the different types of organizations. Beyond this, if a particular type of organization selects leaders who possess a particular set of skills, competencies, and/or values, these choices are intended to influence, and theoretically to improve, the organization’s performance.

Table 23 gives the 19 leadership selection criteria in order of their ranking from most important to least important across governance types. The following represent the top six criteria for leadership selection:

1. Education
2. Values consistent with the hospital
3. Time availability
4. Experience in planning
5. Conflict management skills
6. Health leadership experience

Table 22: Performance Compared to Baselines by Governance Types

Performance Domain	Budgetary	Autonomous	Corporate	Private	Total	V	P
Community Health Outcomes	81.4%	65.0%	36.1%	37.8%	56.4%	.387	.000
Clinical Outcomes	90.5%	66.7%	73.0%	63.2%	73.6%	.242	.025
Financial Outcomes	93.0%	83.7%	83.8%	85.4%	86.6%	.114	ns

Table 23: Leadership Selection Criteria by Governance Types^a

Selection Criteria	Budgetary	Autonomous	Corporate	Private	Total	F	p ^b	Post Hoc Tests ^{c d}
Education	1.32	1.38	1.77	1.56	1.50	2.188	ns	
Values consistent with the hospital	1.54	1.86	1.78	1.52	1.67	1.207	ns	
Time availability	1.68	1.93	2.16	1.95	1.93	1.483	ns	BC
Experience in planning	1.61	2.12	2.21	1.98	1.98	2.582	.055	BA,BC
Conflict management skills	1.51	2.24	1.87	2.29	1.99	5.257	.002	BA,BP
Health leadership experience	1.68	2.07	2.08	2.12	1.99	1.534	ns	
Community leadership	1.95	2.19	2.32	2.14	2.15	.756	ns	
Legal requirements	2.05	2.05	2.18	2.33	2.16	.550	ns	
Clinical experience	1.78	2.12	2.47	2.39	2.18	3.092	.029	BP
Ability to acquire financial support	2.05	2.31	2.21	2.43	2.26	.685	ns	
Public relations knowledge	2.00	2.43	2.26	2.50	2.30	1.915	ns	
Business experience	2.60	2.79	1.97	1.86	2.31	6.150	.001	PB,CA,PA
Knowledge of information systems	1.98	2.64	2.68	2.78	2.52	3.885	.010	BC,BP
Knowledge of health insurance	2.66	2.69	2.82	2.90	2.77	.348	ns	
Previous board experience	2.42	2.95	2.92	2.98	2.83	2.001	ns	
Ability to represent interest groups	2.85	2.63	3.16	2.76	2.84	1.427	ns	AC
Ability to represent patients	2.69	2.74	3.03	3.40	2.97	2.650	.051	BP,AP
Political influence	2.78	3.02	3.30	3.31	3.10	1.633	ns	
Ability to represent payors	3.43	3.73	3.75	3.71	3.66	.492	ns	
Average Rating	2.14	2.42	2.47	2.47	2.37	--	--	--

^a Presented are the results of Analysis of Variance using SPSS 11.5 ANOVA procedure to compare the means of ratings of the importance of 19 criteria for the selection of the ultimate decision makers for hospitals, using Tukey's Honestly Significant Difference (for equal variances) and Tamhane's T2 (where equal variances cannot be assumed). The ratings were on a five-point Likert-type scale where 1 = essential, 2 = very important, 3 = important, 4 = not very important, and 5 = not important. Because these scales are ordinal and not definitively interval, Kruskal-Wallis tests were also conducted. In every instance, Kruskal-Wallis found identical results as ANOVA. ANOVA results are presented here for consistency and clarity of presentation.

^b This column reports the significance levels ($p < .05$) for the main effects comparing all four governance types. The main effects measure systematic, non-random variation with all four types considered together.

^c Post hoc comparisons show the results of post hoc tests using Alpha = .05 and the Least Significant Difference computation (where equal variances are assumed) and Tamhane's T2 (where equal variances cannot be assumed). Each pair of letters identifies the existence and direction of a significant difference between two of the four governance types, which are represented by B (Budgetary unit), A (Autonomized unit), C (Corporate unit), and P (Private unit). For example, the letter pair BP indicates that the Budgetary governance type was found in post hoc tests to be significantly different from the Private governance type, and the Budgetary type appears to more highly value that criterion.

^d It is important to note that for some performance areas, the main effects were found not significant or marginally significant (significance criterion above .05 but less than .10), but some of the post-hoc contrasts were found significant.

The table also shows significant differences ($p \leq .05$) across governance types in four of 19 selection criteria: conflict management skills, clinical experience, business experience, and knowledge of information systems. Two additional criteria reflect differences when $p \leq .10$: experience in planning and ability to represent patients. Post hoc comparisons reveal, generally, that nearly all these criteria are more valued in the selection of leadership for budgetary hospitals. Not unexpectedly, the major exception is business experience which reflects the largest effect ($F = 6.150$). Business experience is the most highly valued criterion for Private hospitals (mean = 1.86) and the second most highly valued selection criterion for corporate hospitals (mean = 1.97). Conversely, it is among the least valued criteria for budgetary and autonomous hospitals.

Tables 24 and 25 provide the results of post hoc contrasts, respectively, between the autonomously and institutionally governed hospitals, and the private versus public hospitals. The institutionally governed types place significantly higher value than autonomously governed types on leadership with Conflict Management Skills, Knowledge of Information Systems, and Public Relations Knowledge. Meanwhile, public types place higher value on Clinical Experience, the Ability to Represent Patients, Education, Knowledge of Information Systems, and Political Influence. In contrast, private types heavily focus their leadership selection criteria on business experience.

One practical outcome of any differences in orientation that the respective governance type may have toward leadership selection criteria is found in the qualifications of hospital directors. The hospital director's role is central to establishing, managing, and communicating about hospital performance methods and results. Consequently, the values underlying this choice and the qualifications of the director are reasonably expected to have an important influence on hospital behavior and performance.

Table 26 reveals that the Budgetary and Autonomous governance types distinguish themselves by (1) being much more likely to appoint physicians with strictly administrative duties as their hospital administrators, and (2) seeking individuals who also have government experience to fill the critical leadership role of hospital director. Table 27 emphasizes these findings by showing that 88.6 percent of budgetary hospitals and 84.1 percent of autonomous hospitals have directors with a terminal degree in medicine. Corporate and private hospitals, meanwhile, are four to seven times more likely to have a director who either does not hold a graduate degree or does hold a non-medical graduate degree. Coupled with the findings summarized previously, corporate and private hospitals appear to emphasize professionalized, business management.⁴¹

Table 24: Leadership Selection Criteria Contrasts for Autonomous v. Institutional Types

Leadership Selection Criteria	Model Contrasts and Results	T	Sig.
Conflict management skills	Institutional types higher than Autonomous	3.63	.001
Public relations knowledge	Institutional types higher than Autonomous	2.09	.038
Knowledge of information systems	Institutional types higher than Autonomous	2.05	.042

Table 25: Leadership Selection Criteria Contrasts for Private v. Public Types

Leadership Selection Criteria	Model Contrasts and Results	t	Sig.
Business experience	Private types higher than Public	4.19	.000
Clinical experience	Public types higher than Private	2.71	.008
Ability to represent patients	Public types higher than Private	2.44	.016
Education	Public types higher than Private	2.31	.023
Knowledge of information systems	Public types higher than Private	2.27	.025
Political influence	Public types higher than Private	2.03	.044

⁴¹ Professional, non-medical managers are essential assets in the fundamental trend of decentralized and corporate authority that characterized evolution of the US health system (Starr, 1982).

Table 26: Hospital Directors' Qualifications across Governance Types

Directors' Qualifications	Budgetary	Autonomous	Corporate	Private	Total	V ^a	P
Physician with administrative duties only	65.9%	70.5%	20.5%	20.5%	44.3%	.481	.000
Government experience	54.5%	77.3%	34.1%	31.8%	49.4%	.367	.000
Physician with clinical privileges	29.5%	15.9%	20.5%	31.8%	24.4%	.151	ns
Ten years in hospital administration	63.6%	72.7%	56.8%	63.6%	64.2%	.118	ns
Formal contract	77.3%	59.1%	61.4%	68.2%	66.5%	.150	ns

^a Using the Cross tabulation procedure of SPSS 11.5, Cramer's V is a conservative, nonparametric, chi-square measure of association between nominal variables. V may be viewed as the association between two variables as a percentage of their total variation.

Table 27: Hospital Directors' Educational Preparation across Governance Types

Director Education	Budgetary	Autonomous	Corporate	Private	Total
Graduate medical degree	88.6%	84.1%	38.6%	50.0%	65.3%
No graduate degree	4.5%	9.1%	36.4%	29.5%	19.9%
Nonmedical graduate degree only	6.8%	6.8%	25.0%	20.5%	14.8%

8. DISCUSSION AND CONCLUSION

Hospital governance research provides little guidance on how to study the impact of governance on hospital performance, let alone in the context of health reform efforts. Several barriers to better governance research persist. There is a lack of data, virtually none about the functions or process of governance, and little derived from observations or information provided by governing body members. Those studies that posit relationships between governance and performance are generally theoretical in nature or based on non-rigorous methodologies. While a few studies, and this study, have shown an association between some aspect of governance and elements of performance, none have included the longitudinal data or research designs necessary to clearly establish that reform-driven governance changes resulted in performance changes. In the absence of longitudinal studies combining quantitative and case-based analyses, a testable theory for explaining how reform elements drive governance models and how governance affects performance cannot evolve.

Nevertheless, a growing body of literature is emerging on governance in the context of public hospital reform. A theoretical perspective that is based on market-based reform of publicly-financed health systems has been evolving along with the studies on governance as a consequence of (i) quantitative research and (ii) the consistent use of one or several elements of this nascent theoretical perspective. This perspective classifies hospitals in a typology according to governance and management discretion, scope of authority, accountabilities and market exposure. This study, drawing on data from hospitals in four Latin American nations, adopts a modified version of this theoretical perspective to identify governance types and to assess whether and how they are related to hospital performance.

As noted in Section 3 above, a series of recent studies in both developed and developing countries have demonstrated an association between autonomy and better hospital performance among public hospitals. In OECD countries, a model is emerging of independent public hospitals that operate at arms length from government. Some countries such as Germany and Belgium have a long tradition of granting decision rights to public hospitals. In other countries, such as

Spain and the UK, there is a clear movement toward greater facility independence (See Box 5 below). In most Latin American countries, however, public (and social security) hospitals have little independence, and are often managed directly by government. Facility managers are mainly responsible for compliance with and administration of rules and norms decided elsewhere in the government hierarchy. The findings of this study suggest that this governance arrangement, at least as practiced in the four sampled countries, is a low performer.

Box 5: Toward Greater Independence of Public Hospitals: The European Experience

Although direct hierarchical management of public hospitals remains a major organizational form in Latin America, this is not the case elsewhere. Though this model was originally adapted from unitary public systems in European countries, particularly in Spain and Portugal, direct public management is today the least dominant model for public hospital organization in Europe. In fact, a variety of models have emerged in Europe. Many are hybrids, occupying a middle ground between semi- and fully-autonomous organizations. Some have significant decision-making authority over key managerial functions such as planning, budgeting and human resource management. In other cases managerial autonomy has been increased through replacing line item budgets by global budgets. In still others, public hospitals are operated more like private organizations in which managers possess full decision-making authority, but are responsible for the “bottom-line” and are exposed to competitive pressures. In nearly all countries, governments have introduced some form of purchasing arrangement in which performance targets are specified in contracts or inter-governmental covenants. In parallel with the introduction of organizational reforms and purchasing arrangements, countries have reformed hospital payment systems and placed increased emphasis on systematic measurement and comparative benchmarking of performance.

Several countries have traditionally granted considerable decision-making authority on input and budget management to public hospitals. Germany, Belgium and Austria are examples of countries where public hospitals possess nearly full autonomy for input management including hiring of firing of personnel, material purchasing and budget management. But exposure to market pressures may be limited (e.g., unable to charge fees or make a profit). Countries such as Italy, Spain, Portugal, United Kingdom, the Baltics and the Scandinavian countries have gradually granted greater decision-making rights and responsibilities to their hospitals. These reforms have been accompanied by the introduction of purchasing arrangements including the “internal” contracting of facilities to set explicit performance targets. In Spain, for example, several areas of the country are experimenting with alternative forms of public ownership such as foundations, consortia and public firms. The Baltic countries have restructured the previously state-owned hospitals into public enterprises. These enterprises are able to contract with the government and social insurance institutions. Finally, some of the newly independent states of Central and Eastern Europe still directly manage public hospitals exerting direct hierarchical control over them. Others have transferred decision-making authority for purchasing non-labor inputs and for determining output mix.

Source: Reproduced from La Forgia, ed. (2007, forthcoming)

Upon comparing the sampled Latin American hospitals by their type of governance, this study’s survey results revealed systematic differences in performance. Some of this study’s analyses compared hospital administrators’ assessment of their own organization’s performance. These comparisons show that budgetary hospitals rate lower than the other types in the 19 comparisons that are made (See Table 16). Autonomized hospitals enjoy only one area of superior performance: they are rated higher in their relations with government than either budgetary or corporate models.

In post hoc comparisons, the two public governance types were found to have higher occupancy rates. In some instances, higher occupancy has traditionally been taken to indicate better use of the organization’s productive capacity. However, the higher occupancy rates of the public hospitals must be viewed in combination with a consistent pattern of results indicating less

effective use of capacity. The public governance types appear less productive when compared to the private types in terms of nurses per bed, admissions per employee, and a number of self-ratings as described above. In fact, costs per bed were lower for the private types, although this effect is not statistically significant when comparing public versus private types ($t = 1.52$, $df = 147$, $p = .13$). Post hoc examinations showed that autonomized hospitals had much higher costs per bed than those that are corporate (mean dif = \$23,695, SE = 11,905, $p = .048$) or private (mean dif = \$22,249, SE = 11,835, $p = .062$).

These data suggest that the higher occupancy rates of the public types may be associated with inefficient treatment and discharge processes rather than greater productivity. Policies governing public health care assets in these nations may or may not explain these inefficiencies, but plausible explanations include the following: public hospitals have patients with more acute illnesses; inefficient discharge processes; inappropriately long hospital stays; inappropriate use of acute care assets for less acute patients; or no place to discharge patients to due to a lack of or ineffective relationships with sub-acute care providers. The possibility that the public hospitals have more acute patients seems less likely given the superior self-ratings of the private types across an array of quality issues related to facility (facility and equipment upkeep), capacity (availability of medicines, sufficiency of auxiliary services), as well as the proportion of licensed nurses. Indeed, as a group, the private hospitals reported both having a broader array of services (providing 63 vs. 58 percent of 15 service lines) and providing a larger proportion of four more intensive services (2.64 v. 2.32), although these differences were not statistically significant. Finally, our findings may well confirm that greater dependency on budgeted funding sources across these four Latin American nations contributes to unnecessary admissions and excessive lengths of stay.

In contrast, the hospitals governed by corporate and private mechanisms show a pattern of being associated with better performance. In particular, private governance types had better performance on quality measures related to facility (facility and equipment upkeep), capacity (availability of medicines and sufficiency of auxiliary services), and level of nurse training. We also found that the private types of governance were associated with superior efficiency as measured by fewer nurses per bed, more admissions per employee, and self-ratings of administrative efficiency.

While movement toward private (nongovernmental) control seems to be related to better hospital performance, this study also found that movement toward autonomous (non-institutional) control is also related to better performance. Autonomous types—whether governmental or private—have advantages in terms of decision making processes, relations with key stakeholders (government relations and physician relations), quality of clinical services, quality of outpatient services, as well as efficiency (lower nurses per bed and higher admissions per bed). In no case did the institutional types (budgetary and corporate combined) outperform the autonomous types (autonomized and private combined).

Overall, this study finds a pattern of private and autonomous governance types having better performance than public and institutional types. This difference in the types appears to be complementary. That is, the combination of public and institutional types (budgetary) was

associated with especially lower performance. Conversely, the combination of private and autonomous (private) was associated with especially higher performance.

Different approaches to reform and different governing models must naturally be related to the values that shape them. Examining the values embedded in policy options, whether about national reform or about how to ensure hospital quality, should help clarify the motivations and consequences underlying the policy. In short, examining these values can help in the interpretation of what the differences mean. One way to look at the values embedded within the different governance types is to study the characteristics emphasized in the selection of leadership.

Nineteen criteria for selecting hospital leadership were rated for their importance (see Table 23). Across the four governance types, the six most important of these criteria were: education, values consistent with the hospital, time availability, experience in planning, conflict management skills, and health leadership experience.

Public hospitals rated five criteria significantly higher than private hospitals. The public types sought leaders with clinical experience, the ability to represent patients, education, knowledge of information systems, and political influence. In contrast, respondents from privately controlled hospitals rated only one value significantly higher than their public counterparts: business experience. Business experience was rated the 14th most important for budgetary types and 16th most important for autonomous types, but 4th most important for corporate types and 3rd most important for Private types. This difference also shows up when the characteristics of hospital administrators are compared. The corporate and private governance types are much more likely to hire non-medical managers who seem to have been selected for their business experience. Meanwhile, budgetary and autonomized types tend to select physicians with government experience to direct the hospitals they govern. These findings show that different governance types make decisions based on different value sets and that these decisions can have practical consequences that are likely to influence the hospital's behavior day-in and day-out.

This study presents evidence of systematic differences in governance types and hospital performance. Reforms that result in different approaches to organizational autonomy are associated with indicators of better quality, efficiency, and stakeholder relations. However, while this study did not have the data needed to measure equity, we did find possible indirect evidence of an association between governance practices and inequities.

First, as noted above, the respondents of budgetary and autonomized public hospitals are significantly more likely to value a broader set of leadership selection criteria. The budgetary type in particular stands out in this regard. The average rating across all 19 leadership selection criteria was 2.14 for the budgetary type, versus approximately 2.4 for the other types. Post hoc ANOVA analyses confirm major differences compared to Corporate (Mean Dif. = .379, SE = .152, $p = .014$), Private (Mean Dif = .339, SE = .151, $p = .027$), and, to a somewhat lesser degree, autonomized types (Mean Dif = .292, SE = .151, $p = .056$). This shows that the managers of budgetary hospitals tended to rate different selection criteria as important. In a similar vein, more budgetary respondents report the use of benchmarking methods to measure community health and quality of care outcomes. In contrast, financial benchmarks were used by similar

percentages across the governance types. One possible explanation for budgetary hospitals' broader scope of leadership selection criteria and performance benchmarking is that hospitals governed under a budgetary approach are poorly guided and so focus on many different objectives.⁴² A diffusion of focus could reduce leadership effectiveness and thereby have consequences for hospital performance.

As suggested above, budgetary hospitals are more tightly bound to the public health system and its responsibilities beyond hospital care, including overall public and community health. As a result, budgetary hospitals may be expected to strive toward a broader set of values and to carry out a broader performance agenda. The results in this study only give a glimpse of this critical issue. It begs for answers to long-term questions about where greater provider independence or a more pluralistic public delivery system may eventually lead in Latin America. After achieving greater provider independence, how can a nation best integrate services across levels of care and even between different organizations and sectors with the goal of an un-fragmented continuum of care and overall health improvement? Care coordination and community health have been a focus of much concern in OECD countries, especially in the past 20 years, in which care coordination is increasingly part of broader movement toward explicit function definition achieved through purchasing strategies and regulation (Bogue & Hall, 1997; Davidow & Hall, 1999; Weil, Bogue, & Morton, 2001; Oates and Jensen, 2000; Figueras et al., 2005). Are budgetary hospitals in Latin America expected to provide a wider array of community-based health services and/or social benefit functions than the other types of hospitals? If this is the case, an essential element of planning for greater facility autonomy would be to determine the kinds of instruments that can coordinate independent hospitals in a pluralistic system, guiding them to the achievement of social objectives, while also allowing them to focus more tightly on the business of efficiently running a high quality hospital.

Latin America is facing the same issues other pluralistic health systems are struggling with – getting hospitals to provide quality care efficiency while attending to broader system goals and community needs. This study demonstrates that governance is a key policy lever that governments can use to achieve objectives in the hospital sector. As elsewhere, hospital independence is associated with performance in a number of areas. However, the study also highlights the need to provide guidance and develop instruments for hospitals to perform social functions.

9. LIMITATIONS AND FUTURE RESEARCH

This is the first survey-based study on the structures and functions of hospital governance across Latin American nations. As such, it represents a starting place for further examination of the critical issues explored here. But due to the lack of previously tested theoretical linkages between governance practices and hospital performance, as well as limitations of the data and other issues, this study's results must be considered introductory and not definitive.

⁴² It is important to note, however, that there is often a poor distinction between public hospital objectives and health system (or even reform) objectives. Referring to public hospitals of the budgetary type, Harding and Preker (2003:52) state: “the government’s objectives in running the hospitals closely resemble sector objectives and are often unrecorded and unmonitored. The social functions performed by the hospital are not distinguished from its other activities – nor are they funded separately.”

A few limitations should be kept in mind. First, interviews conducted with leaders in health care in each of the target nations revealed that there does not appear to be a high degree of standardization in training and education for health system management and governance throughout Latin America. As a consequence, it was expected that the raw data might contain more noise than more standardized areas of research. Reasons for this include the following: terms might not have consistent meaning across respondents; as is common in international, multi-site work, the project faced challenges in defining and implementing the survey's protocol consistently; and hospitals' record keeping and reporting might not be highly standardized, so even if concepts are clearly understood and data collection protocol work perfectly, those completing surveys in the hospitals may not have the needed information. Evidence from examination of outlying values in the raw data suggested that these and other concerns may have affected the quality of the data examined here. Due to quality concerns, certain variables were not analyzed at all. For those that were analyzed, more consistently reliable survey responses would likely increase, rather than decrease, the size of effects assessed by statistical procedures; as a consequence, the results reported here are more likely to include false negatives, reporting no significant difference when one does, in reality, exist. Readers interested in additional details on how this issue was addressed should refer to Annex 1.

Second, the current data do not enable one to assess cause-effect relations. When one group or another is found to experience superior performance, it cannot be known, for certain, whether the group's approach to governance causes the better performance, is a consequence of the better performance, or merely takes place in hospitals that perform better for reasons totally unrelated to the group's approach to governance. It cannot be said with the results in this report that different types of governance lead to improved performance, only that the types of governance are associated with different indicators of performance. To achieve predictive ability, research on governance requires either longitudinal studies that repeat the measurements of key variables or the development of reliable baseline measurements by means of repeated use of variables with various populations of hospitals.

Third, linking governance to hospital performance remains a difficult challenge. This study examines associations between types of governance and indicators of hospital performance. Separate multivariate analyses controlled for potentially confounding variables, as described in Annex 2. Nevertheless, drawing from repeatedly used approaches to describing governance, many elements of which were not examined in this particular paper, this research represents a unique opportunity for examining the governance-performance linkage in hospitals. However, to be able to determine the linkages in practice between governance practices and hospital performance, the field needs to link quantitative data with in-depth case examinations of the actual governance and management practices in hospitals.

To address these limitations, future research should consider creating and sustaining the methods and mechanisms for better regulating and managing the conduct of scientific inquiry in different nations. Without standardized methods and mechanisms for conducting research in this domain, rapid progress in advancing knowledge will be impossible. There are some questions for other areas for applied research that, if answered, could help establish a tradition of research on governance and performance that would have practical value for policy makers. How can the findings from this and other studies on hospital governance contribute to a comprehensive and

testable model for health policy makers and hospital leadership to guide reforms in governance practices? What relevant and specific elements of national hospital policy environment that can be measured in standardized ways so that the policy environment can be part of analyses? What standards should be used to evaluate the impact of different reform initiatives? For example, is financial performance and efficiency more important than quality or community accountability?

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ANNEX 1: DATA QUALITY ISSUES

First, after data entry, ten percent samples of surveys were reviewed to evaluate the frequency and nature of any data entry errors. Overall, data entry errors were found to occur in fewer than .5 percent of entries (one-half of one percent). Errors that were found were corrected. Variables with systematic errors were examined in greater depth, and all discovered errors were corrected.

Second, a review was conducted of unexpected or inconsistent values for certain variables. Generally, responses affirmed that the respondents tended to provide the same kind of information in response to specific items, thus suggesting that respondents had a consistent understanding of what they were being asked. However, after examination of some variables, it was determined that there was inadequate consistency in how respondents were apparently interpreting the survey. Some variables were eliminated from all analyses on the basis of these findings. For example, a variable asking respondents to supply the “bed rotation” of the hospital was responded to in a variety of different ways, including percentages and whole positive numbers greater than one across a wide range. The data suggested that respondents did not consistently understand what they were being asked for, and a “bed rotation” variable was eliminated as a candidate for use in analyses.

Third, variables used in the analysis presented here were examined for outliers, defined as values lying two or more standard deviations from the mean. Outlying values were examined for their prima facie sensibility, and by reviewing how they varied in relation to the raw values of variables that should associate or correlate with them. Generally, the researchers preferred to avoid eliminating observations and rarely found compelling evidence to do so. However, in some cases, it was determined that eliminating variables from the data set was sometimes prudent. In the case, for example, of “census beds,” a number of respondents appeared to have provided values of the right kind, but too extreme to be taken as valid responses. Two hospitals with more than 65 beds each, for example, reported 2 and 3 “census beds” each. These census bed observations were among those eliminated from the final dataset.

Fourth, data review and analytic procedures revealed inconsistencies or errors in design that had not previously been noted. For example, with guidance from World Bank and local experts, the survey was designed such that responding hospitals could identify themselves as “public,” “private” or “combined public/private.” The “combined” option was available to respondents in Argentina, where none selected this option, and Mexico, where four hospitals did. In Colombia, this choice was not offered, as local advice indicated that it might produce confusing or inaccurate responses. In Brasil, respondents were given the choices of and public, private or “philanthropic” (where 48 did so) due to last-minute changes made in the survey at the local level. By definition, however, philanthropic hospitals would normally be included as private hospitals. Hence, the “combined” hospitals in Mexico and the “philanthropic” hospitals in Brasil were added to the private group.

Analyses were designed to examine the data both regionally (aggregating across the four nations, with maximum N's of 397) and by comparing the four nations to each other. Due to the limited number of observations from Argentina, some relatively substantial differences between

governing practices in Argentina's hospitals those same practices in other nations may not be observed as statistically significant.

Even with these procedures and caveats in mind, the data reported here are likely to be relatively noisy, compared to more highly standardized areas of scientific inquiry where data definition and collection systems have long existed. As a result, random variation is likely to be greater than would be found if there were stronger traditions of defining terms and collection methods in the domain of Latin American health care governance. This makes it more possible that meaningful results will not be identified as statistically significant; that is, the rate of "false-negative" findings should be higher; meaningful variation between groups of hospitals may exist in reality, but not be observable in these data even if the right questions were asked in the right way. Meanwhile, non random and systematic variation is likely to be less easy to observe; when statistically significant results are found, in this kind of case, they are more likely to be robust and reflective of meaningful, interpretable variation, unless some systematic source of bias exists, is overlooked, and is misinterpreted as something else.

ANNEX 2: CONTROLLING FOR CONFOUNDING VARIABLES

The governance types are constructs that may be dependent on or associated with confounding variables. For example, the size of a hospital, the level of funding for a hospital, hospital case mix and country characteristics may potentially be such variables that could diminish the effects between governance types and the performance variables.

To test this hypothesis we performed multivariate analyses that controlled for these variables in order to determine whether the associations between the governance types and performance variables are independent of the effects of such confounding variables. While the non-parametric, ranking procedures used to assess the associations between governance types and performance variables in this report give conservative univariate results, hierarchical multiple regression analyses were conducted to assess the independence of the associations between each performance variable and the governance types. This was done by comparing the fit of regression models by entering potentially confounding variables in block 1 of the hierarchical regression (model 1) and governance type variables in block 2 (model 2). The independent association of the governance variables with the performance variables was assessed using the significance of the change in R^2 upon inclusion of the governance type variables in model 2.

Three confounding variables were analyzed: (i) *hospital size* was measured with the variable Total Beds; (ii) *level of funding* was measured with the variable Costs per Bed, standardized in US dollars; and (iii) although no direct measure of *case mix* was available from the survey, as a proxy indicator, the count of four more highly specialized services (cardiology, endocrinology, neurology and oncology) was used; 17.9% of the sample reported offering zero of these four services, while 12% offered one, 15% offered two, 18.2% offered three, and 37% offered all four. These potentially confounding variables were entered, stepwise, in model 1: costs per bed standardized to \$US, total beds, and the count of highly specialized services. In model 2, dummy variables representing the two orthogonally defining elements of the governance types (see Table 13) were entered: public or private, and institutional or autonomous.

For both the self-reported and the objective performance indicators, the main effects reported in this study to exhibit a significant association between governance types and performance variables were confirmed when controlling for these potentially confounding variables as described. That is, when including the controlling variables, the governance type variables were found to have independent and significant explanatory power for the performance variables, in the same pattern as shown in Tables 16 and 19. In addition, these controlling variables were found to have independent explanatory power for 17 of the 26 performance variables (for example, Costs per Bed in 13 performance variables, Service Mix in 4, Total Beds in 2, etc.). An examination of these associations is outside the scope of this monograph. In sum, although these controlling variables had independent effects, they did not diminish or confound the association between governance types and the performance variables.

In a separate analysis, ANOVA, using the GLM (General Linear Models) procedure in SPSS, were conducted to determine whether the inclusion of the variable Country would account for the associations between governance types and performance. Country was treated as a fixed factor.

Again, the main effects reported here were confirmed. Country was found to have independent and significant explanatory power for six of the 26 performance variables.

ANNEX 3: COLOMBIAN SURVEY INSTRUMENT

#

BANCO MUNDIAL
ENCUESTA REGIONAL SOBRE GOBERNABILIDAD Y GESTIÓN HOSPITALARIA
ARGENTINA, BRASIL, COLOMBIA Y MÉXICO
Junio, 2002

Política de Confidencialidad

La información provista por este cuestionario será tratada confidencialmente. Protegeremos su confidencialidad y no publicaremos ni comunicaremos los resultados; éstos se utilizarán sólo para fines estadísticos de manera agregada con los resultados de otros hospitales. Si bien estamos prometiéndole confidencialidad absoluta, necesitamos ciertos datos identificando al hospital para poder relacionar los datos de su hospital con datos de otras fuentes de información. Para asegurar la calidad del proceso de la encuesta por medio de llamadas telefónicas con algunos de los encuestados, necesitamos también ciertos datos sobre los encuestados.

Sección A: Identificación de la Encuesta

1. a. Nombre del hospital _____
b. Naturaleza Jurídica: Público _____ Privado _____
c. Nivel del Hospital _____
d. País del hospital _____
e. Departamento en cual está ubicado el hospital _____
f. Ciudad en cual está ubicado el hospital _____
2. Identificación del Encuestado, de quien resuelve el cuestionario. Si quiere usted recibir una copia de un resumen de los resultados de esta encuesta, marque aquí (_____) e incluya dirección electrónica abajo.
 - a. Nombre y Apellido _____
 - b. Cargo en el Hospital _____
 - c. Dirección _____
Dirección _____
Dirección Electrónica _____ @ _____
 - d. Número Telefónico _____

Sección B: Servicios del Hospital

3. a. _____ ¿En total, cuántas camas tiene el hospital?
b. _____ ¿Cuántas camas censales tiene el hospital? (*Incluya solamente camas que están disponibles continuamente para pacientes que permanecen en el hospital al menos 24 horas; no incluya camas que no están en uso o que son para familiares o para pacientes que permanecen en el hospital menos de 24 horas.*)
4. a. _____ ¿Cuántos auxiliares de enfermería trabajan en el hospital?
b. _____ ¿Cuántas enfermeras profesionales sin licenciatura trabajan en el hospital?
c. _____ ¿Cuántas licenciadas en enfermería trabajan en el hospital?
d. _____ ¿Cuántos médicos trabajan en el hospital?
e. _____ ¿En total, cuántos empleados tiene el hospital?
5. ¿Está abierto el hospital las 24 horas para casos de urgencia?
a. _____ Sí b. _____ No
6. _____ ¿Cuántos quirófanos tiene el hospital?
7. ¿Por cuales de las siguientes especialidades provee servicios el hospital en sí? (*No incluye servicios prestados por consultas externas*)
- | | |
|--|------------------------------------|
| a. _____ Medicina General | i. _____ Pediatría |
| b. _____ Medicina Familiar | j. _____ Psiquiatría |
| c. _____ Medicina Interna | k. _____ Cirugía |
| d. _____ Cardiología | l. _____ Dermatología |
| e. _____ Neurología | m. _____ Oncología |
| f. _____ Endocrinología | n. _____ Geriátrica / Gerontología |
| g. _____ Gastroenterología | ñ. _____ Hematología |
| h. _____ Obstetricia / Ginecología | o. _____ Patología |
| p. Otra especialidad de servicio _____ | |
| q. Otra especialidad de servicio _____ | |
| r. Otra especialidad de servicio _____ | |
| s. Otra especialidad de servicio _____ | |

Sección C: Uso del Hospital y Fuentes Financieras

8. a. _____ ¿Cuántos pacientes que permanecieron más de 24 horas egresaron en el 2001?
b. _____ ¿Cuántos partos y cesáreas se atendieron en el hospital en el 2001?

- c. _____ ¿Cuántos pacientes se atendieron en la sala de urgencias en el 2001?
- d. _____ ¿Cuántas consultas externas en total prestaron en el hospital en 2001?
- e. _____ ¿Cuál fue el porcentaje ocupacional (tasa ocupacional) del hospital en el 2001?
- f. _____ ¿Cuánto fue el promedio de rotación de camas (giro cama) en el 2001?
9. ¿Cuántos fueron los ingresos financieros del hospital en el 2001 según las siguientes fuentes? (*Poner Cifras en Moneda Nacional*)
- a. \$_____ Ingreso de facturación por atención a vinculados
- b. \$_____ Recursos de oferta por funcionamiento
- c. \$_____ Ingresos por contratos de servicio con el Instituto de Seguro Social
- d. \$_____ Ingresos del Instituto de Seguro Social por presupuesto (aplica para IPS del ISS)
- e. \$_____ Ingresos por contratación con EPS, ARS, SOAT, ARP y otras entidades de seguros de carácter público y privado, diferentes al Seguro Social
- f. \$_____ Ingresos por atención a particulares
- g. \$_____ Ingresos por donaciones y auxilios
- h. \$_____ Otra fuente importante de ingresos (*Especifique*)_____
- i. \$_____ ¿Cuál fue el total de ingresos para el hospital en 2001?
10. \$_____ ¿Cuánto fue el total de gastos (gastos de cualquier concepto) del hospital en el 2001?
- ¿Además de los ingresos mencionados en la pregunta 9, en 2001, cuál es el valor estimado de cualquier tipo de ayuda en especie o donación que recibió el hospital según los siguientes ítems?
11. Personal de plantilla, para el funcionamiento del hospital (no incluido en el presupuesto)
- a. Sí, por un monto estimado de \$_____ b. _____ No
12. Medicamentos (tales como donaciones)
- a. Sí, por un monto estimado de \$_____ b. _____ No
13. Suministros y equipos
- a. Sí, por un monto estimado de \$_____ b. _____ No

Sección D: Las Funciones de La Gestión

14. ¿Quién es la autoridad principal del hospital (o sea, está por encima de todos los demás y no tiene que pedir permiso de cualquier *otro* individuo o grupo o departamento del gobierno para tomar decisiones que le convengan al hospital)? (*Marque la respuesta más correcta*)

- a. _____ Una compañía o sistema del sector privado
- b. _____ Una iglesia o una entidad de religión
- c. _____ Una fundación u organización de caridad pero no religiosa
- d. _____ Una universidad o colegio
- e. _____ Un departamento o secretaría del gobierno municipal
- f. _____ Un departamento o secretaría del gobierno estatal o provincial
- g. _____ Un ministerio o secretaría del gobierno federal o central
- h. _____ Un Instituto de Seguro Social
- i. _____ Un consejo o junta directiva del hospital que es autónoma, tiene autoridad final, y no tiene que pedir permiso de cualquier otro individuo o grupo o departamento de gobierno para tomar decisiones que le convengan al hospital
- j. _____ Otro (*Escríbalo aquí por favor*) _____

15. ¿Quién tiene la autoridad en última instancia para las funciones de gestión? Si la autoridad para una función está compartida, marque más de una respuesta.	La Dirección o Gerencia del Hospital	Entidad Autoridad Principal (De Ítem 14)	Con Otra Entidad (Escríbala aquí)	Nadie Tiene Autoridad Esta Función No Existe
a. Decidir el salario del director o gerente general	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
b. Evaluar formalmente al gerente general	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
c. Despedir al gerente general	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
d. Nombrar al nuevo gerente general	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
e. Cambiar la misión del hospital	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
f. Aprobar un plan estratégico	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
g. Cambiar los reglamentos internos del hospital	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
h. Asegurar la calidad en la gestión / manejo del hospital	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
i. Formar nueva compañía subsidiaria del hospital	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
j. Tomar decisiones sobre el patrimonio del hospital	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
k. Aprobar el presupuesto de operación ⁴³	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
l. Aprobar presupuesto de inversión ⁴⁴	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
m. Añadir o eliminar servicios	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
n. Permitir que un medico trabaje en el hospital	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
ñ. Decidir que tipo de servicios un médico puede prestar o no en el hospital	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
o. Asegurar la calidad de servicios	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
p. Asegurar que el hospital esté cumpliendo con sus compromisos y obligaciones con la comunidad	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
q. Asegurar que el hospital esté cumpliendo con sus compromisos y obligaciones con el gobierno	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
r. Conseguir donaciones y regalos	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>

⁴³ Presupuesto de operación: Parte del presupuesto que resulta del uso del hospital. Incluye salarios, materias, utilidades, rentas, deudas, etcétera.

⁴⁴ Presupuesto de inversión: Parte del presupuesto que resulta de la compra de nuevos equipos o de la construcción de nuevos edificios.

s. Asegurar ingresos adecuados y gastos apropiados

16. Indique la importancia de las siguientes competencias, experiencias, o características en el nombramiento o la elección de la persona o las personas que pertenecen a la autoridad principal para el hospital, indicado en el ítem 14. *(Marque con un círculo una respuesta por cada característica)*

		Esencial	Importa Mucho	Importa	Importa Poco	No Importa
a.	Educación previa	E	IM	I	IP	NI
b.	Experiencia clínica	E	IM	I	IP	NI
c.	Liderazgo comunitario	E	IM	I	IP	NI
d.	Representación de pagadores de servicios	E	IM	I	IP	NI
e.	Representación de pacientes	E	IM	I	IP	NI
f.	Representación de grupos de interés	E	IM	I	IP	NI
g.	Manejo de conflictos	E	IM	I	IP	NI
h.	Negocios	E	IM	I	IP	NI
i.	Procurar financiamiento	E	IM	I	IP	NI
j.	Sistemas informáticos	E	IM	I	IP	NI
k.	Seguros y planes de salud	E	IM	I	IP	NI
l.	Una ley-reglamento	E	IM	I	IP	NI
m.	Gestión en salud	E	IM	I	IP	NI
n.	Influencia política	E	IM	I	IP	NI
o.	Experiencia previa en consejos	E	IM	I	IP	NI
p.	Relaciones publicas	E	IM	I	IP	NI
q.	Planificación	E	IM	I	IP	NI
r.	Tiempo disponible	E	IM	I	IP	NI
s.	Valores consistentes con los del hospital	E	IM	I	IP	NI

Sección E: Mecanismos de Monitoreo y Comprobación

17. Entre las siguientes posibilidades, indique quien revisa regularmente la información y datos del hospital para monitorear el funcionamiento del mismo.	La Dirección o Gerencia del Hospital	Entidad del Autoridad Principal (Indicado en ítem 14)	Con Otra Entidad (Escribala aquí)	Nadie Revisa Estos Datos Regularmente O Ni Existen
a. Tasa de mortalidad	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
b. Tasas de morbilidades	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
c. Readmisiones no programadas	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
d. Medidas de la salud comunitaria	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
e. Cobertura de inmunizaciones en la población local	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
f. Comportamiento presupuestario	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
g. Estadísticas de utilización de servicios del hospital	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
h. Plan de inversión en infraestructura y equipos	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
i. Encuestas de actitud de los empleados	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
j. Encuestas de satisfacción de los pacientes	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>
k. Otra información (Describala por favor)	_____			

18. ¿La autoridad principal (indicada en ítem 14) evalúa el progreso del hospital comparando las estadísticas del hospital y la población local contra estándares publicados de los siguientes tipos?	Si	No	Sé
a. Resultados clínicos (por ejemplo, el porcentaje nacional de mortalidades entre las cirugías programadas o de admisiones que resultan en readmisiones no programadas)	S	N	NS
b. Estándares de eficiencia hospitalaria (por ejemplo, el promedio en la provincia o estado de la tasa ocupacional o del tiempo de espera para cirugías programadas)	S	N	NS
c. Estándares de salud comunitaria o pública (por ejemplo, el porcentaje de niños en la provincia o estado que han recibido todas las inmunizaciones recomendadas antes de tener seis años)	S	N	NS
d. Otro (Especifique) _____			

Sección F: Opiniones Sobre La Función del Hospital

19. Indique su calificación de las siguientes funciones del hospital en una escala de 1 a 9, donde 1 es “excelente,” 5 es “regular,” y 9 es “deficiente.” (Para cada función del hospital marque el número que refleja su opinión.) NS = No sé, o no tengo opinión.

	Exc				Reg				Def	NS
	1	2	3	4	5	6	7	8	9	NS
a. Calidad de servicios clínicos	1	2	3	4	5	6	7	8	9	NS
b. Calidad de servicios de especialistas	1	2	3	4	5	6	7	8	9	NS
c. Calidad de las consultas externas	1	2	3	4	5	6	7	8	9	NS
d. Calidad de los servicios comunitarios	1	2	3	4	5	6	7	8	9	NS
e. Cantidad de servicios prestados	1	2	3	4	5	6	7	8	9	NS
f. Eficiencia económica - financiera	1	2	3	4	5	6	7	8	9	NS
g. Facilidad de acceso a los servicios	1	2	3	4	5	6	7	8	9	NS
h. Eficiencia de la administración del hospital	1	2	3	4	5	6	7	8	9	NS
i. Efectividad de la gestión del hospital	1	2	3	4	5	6	7	8	9	NS
j. Proceso de planificación	1	2	3	4	5	6	7	8	9	NS
k. Claridad de responsabilidades	1	2	3	4	5	6	7	8	9	NS
l. Proceso de toma de decisiones	1	2	3	4	5	6	7	8	9	NS
m. Relaciones con la comunidad	1	2	3	4	5	6	7	8	9	NS
n. Relaciones con el gobierno	1	2	3	4	5	6	7	8	9	NS
ñ. Relaciones con los médicos	1	2	3	4	5	6	7	8	9	NS
o. Conservación del inmueble	1	2	3	4	5	6	7	8	9	NS
p. Conservación del equipamiento	1	2	3	4	5	6	7	8	9	NS
q. Disponibilidad de medicamentos	1	2	3	4	5	6	7	8	9	NS
r. Suficiencia de servicios auxiliares de diagnóstico y tratamiento	1	2	3	4	5	6	7	8	9	NS

Sección G: Comités y El Consejo de Gestión

20. ¿Tiene el hospital un comité o consejo consultivo que provee avisos, sugerencias, o recomendaciones a la autoridad principal indicada en ítem 14?
- a. ____ Sí
- b. ____ No
21. ¿Tiene el hospital un consejo o junta directiva que es autónoma, tiene autoridad final, y no tiene que pedir permiso de cualquier otro individuo o grupo o departamento de gobierno para tomar decisiones que le convengan al hospital
- a. ____ Sí (**Continúe con la pregunta ítem 28**)
- b. ¿Cómo se llama este grupo? _____
- c. ____ No (**Vaya directamente a la pregunta ítem 38**)

22. Provea la siguiente información sobre la membresía del consejo del hospital.
- _____ Número total de posiciones en el consejo (incluyendo vacantes)
 - _____ Número de posiciones con privilegio a votar
 - _____ Número de posiciones del consejo que están actualmente vacías
 - _____ Número de miembros actuales que son mujeres
 - _____ Número de miembros actuales con 71 años de edad o más
 - _____ Número de miembros actuales con 51 a 70 años de edad
 - _____ Número de miembros que representan un sindicato de empleados
 - _____ Número de miembros que representan un sindicato de profesionales
 - _____ Número de médicos que sirven actualmente como miembro el consejo
 - _____ Número de médicos que sirven como miembros del consejo y también prestan servicios médicos en el hospital
 - _____ Número de miembros del consejo que viven afuera de la comunidad servida por el hospital
23. ¿Quién tiene la autoridad de nombrar nuevos miembros del consejo?
- _____ La entidad indicada en el ítem 14
 - _____ El consejo
 - _____ La junta directiva del consejo
 - _____ Organizaciones con derecho de nombrar un miembro propio para el consejo
 - _____ Un oficio del gobierno
 - _____ Otro (Nómbrelo: _____)
24. ¿Quién tiene la autoridad de despedir a un miembro del consejo?
- _____ La entidad indicada en ítem 14
 - _____ El consejo
 - _____ La junta directiva del consejo
 - _____ Organizaciones con derecho de nombrar un miembro propio para el consejo
 - _____ Un oficio del gobierno
 - _____ Otro (Nómbrelo: _____)
25. ¿Quién tiene el derecho de cambiar los reglamentos internos del consejo?⁴⁵
- _____ La entidad indicada en ítem 14
 - _____ El consejo
 - _____ La junta directiva del consejo
 - _____ Organizaciones con derecho de nombrar un miembro propio para el consejo
 - _____ Un oficio del gobierno
 - _____ Otro (Nómbrelo: _____)
26. ¿Cuánto dura un periodo de servicio para las siguientes categorías de membresía?
- _____ (meses) Presidente, Vicepresidente, Tesorero, Secretaria / O No hay limite →
 - _____ (meses) Otros miembros / O No hay limite →
27. ¿Cuántos periodos de servicio son el máximo para las siguientes categorías?
- _____ Presidente, Vicepresidente, Tesorero, Secretaria / O No hay limite →
 - _____ Otros miembros / O No hay limite →

⁴⁵ Reglamentos: Un documento o documentos que formalizan quienes tienen autoridad por cuales responsabilidades y las políticas y procedimientos que usan para actualizar estas autoridades. En inglés "by-laws."

28.	¿Que tipo de compensación o reembolso reciben los miembros del consejo por su servicio?	Sí	No
a.	Pago fijo anualmente	S	N
b.	Pago fijo por cada reunión asistida	S	N
c.	Reembolso de gastos para viajar a las reuniones	S	N
d.	Reembolso de gastos para asistir en eventos educativos	S	N
e.	Otro (<i>Describalo</i>) _____		
29.	¿Tiene el hospital un programa formal de educación para los miembros del consejo?		
a.	_____ Sí		
b.	_____ No		
30.	¿Hay un presupuesto dedicado a la educación de los miembros del consejo?		
a.	_____ Sí		
b.	_____ No		
31.	¿Hay algún requisito para los miembros del consejo en asistir a una cierta cantidad de eventos educativos cada año?		
a.	_____ Sí		
b.	_____ No		

Sección H: Características de la Dirección del Hospital

32. ¿Cuáles de las siguientes características tiene el director o gerente del hospital? (*Marque todos los que apliquen*)
- _____ Es médico y presta servicios clínicos en este hospital
 - _____ Es médico y su rol en este hospital es totalmente administrativo
 - _____ Tiene una maestría o doctorado en administración hospitalaria
 - _____ Tiene una maestría o doctorado en administración pública
 - _____ Tiene una maestría o doctorado en salud pública
 - _____ Tiene otra maestría o doctorado (*Cítelo: _____*)
 - _____ Tiene 10 años o más de experiencia en la administración hospitalaria
 - _____ Tiene experiencia previa trabajando para el gobierno
 - _____ Tiene un contrato formal para su rol de director o gerente del hospital
 - _____ Tiene una posición en el consejo o junta directiva del hospital
 - _____ Tiene voto en el consejo o junta directiva del hospital

Sección I: Opiniones y Sugerencias Abiertas

33. a. ¿Qué sugería usted para mejorar el sistema hospitalario en su país?
- b. ¿Qué sugería usted para mejorar la gestión hospitalaria en su país?
- c. ¿Cuáles aspectos de la gestión / manejo de su hospital funcionan especialmente bien?
- d. ¿Qué sugería usted para mejorar la gestión de su hospital en particular?

Instrucciones Finales

Muchas gracias por su participación. Por favor, regresa la encuesta completa a la Asociación Colombiana de Hospitales y Clínicas, Carrera 4 No. 73 - 15 de Bogotá, tel. 3 124411



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