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Brazil's Primary Care Strategy

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Brazil's Primary Care Strategy¹

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The World Bank’s Universal Health Coverage Studies Series (UNICO)

All people aspire to receive quality, affordable health care. In recent years, this aspiration has spurred calls for universal health coverage (UHC) and has given birth to a global UHC movement. In 2005, this movement led the World Health Assembly to call on governments to “develop their health systems, so that all people have access to services and do not suffer financial hardship paying for them.” In December 2012, the movement prompted the United Nations General Assembly to call on governments to “urgently and significantly scale-up efforts to accelerate the transition towards universal access to affordable and quality healthcare services.” Today, some 30 middle-income countries are implementing programs that aim to advance the transition to UHC, and many other low- and middle-income countries are considering launching similar programs.

The World Bank supports the efforts of countries to share prosperity by transitioning toward UHC with the objectives of improving health outcomes, reducing the financial risks associated with ill health, and increasing equity. The Bank recognizes that there are many paths toward UHC and does not endorse a particular path or set of organizational or financial arrangements to reach it. Regardless of the path chosen, successful implementation requires that many instruments and institutions be in place. While different paths can be taken to expand coverage, all paths involve implementation challenges. With that in mind, the World Bank launched the Universal Health Coverage Studies Series (UNICO Study Series) to develop knowledge and operational tools designed to help countries tackle these implementation challenges in ways that are fiscally sustainable and that enhance equity and efficiency. The UNICO Studies Series consists of technical papers and country case studies that analyze different issues related to the challenges of UHC policy implementation.

The case studies in the series are based on the use of a standardized protocol to analyze the *nuts and bolts* of programs that have expanded coverage from the bottom up—programs that have started with the poor and vulnerable rather than those initiated in a trickle-down fashion. The protocol consists of nine modules with over 300 questions that are designed to elicit a detailed understanding of how countries are implementing five sets of policies to accomplish the following: (a) manage the benefits package, (b) manage processes to include the poor and vulnerable, (c) nudge efficiency reforms to the provision of care, (d) address new challenges in primary care, and (e) tweak financing mechanisms to align the incentives of different stakeholders in the health sector. To date, the *nuts and bolts* protocol has been used for two purposes: to create a database comparing programs implemented in different countries, and to produce case studies of programs in 24 developing countries and one high-income “comparator,” the state of Massachusetts in the United States. The protocol and case studies are being published as part of the UNICO Studies Series, and a comparative analysis will be available in 2013.

We trust that the protocol, case studies, and technical papers will provide UHC implementers with an expanded toolbox, make a contribution to discussions about UHC implementation, and that they will inform the UHC movement as it continues to expand worldwide.

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Abbreviations

CPMF	Contribuição Provisória sobre Movimentação ou Transmissão de Valores e de Créditos e Direitos de Natureza Financeira (federal tax on financial transactions)
FHS	Family Health Strategy (formerly Family Health Program, Programa Saúde da Família)
GDP	gross domestic product
HCP	health care program
IBGE	Brazilian Institute for Statistics and Geography
IDSUS	Índice de Desempenho do SUS
INAMPS	Instituto Nacional de Assistência Médica da Previdência Social
InCor	the Heart Institute in São Paulo
MOH	Ministry of Health
OOP	out-of-pocket payments
PAB	Piso da Atenção Básica fixo, fixed PAB
PACS	Community Health Agents Program, Programa de Agentes Comunitários de Saúde
PCS	Primary Care Strategy
PNAD	Pesquisa Nacional por Amostra de Domicílio
POF	Pesquisa de Orçamento Familiar
SIA	Sistema de Informações Ambulatoriais
SIAB	Sistema de Informação da Atenção Básica
SIH	Sistema de Informações Hospitalares
SUS	Unified Health System, Sistema Único de Saúde

Executive Summary

Since the return to democracy in the 1980s, Brazil has embraced a development model that promotes inclusive growth through substantial investments in social programs aimed at alleviating poverty and improving the quality of life of poor families. This was achieved through targeted social programs, such as the conditional cash transfer program, Bolsa Família, and through broad reforms such as the overhauling of the health system and the creation of a tax-financed national health system, the Unified Health System (Sistema Único de Saúde, SUS). The SUS embodies the principles laid out in the 1988 constitution that establishes universal and egalitarian access to health care as a right of the citizen and an obligation of the state.

The SUS unified the existing disparate contributory and public subsystems (Social Security, the Ministry of Health, states and municipalities) into one coordinated national system to which the entire population is entitled. It also invested heavily in primary care, fundamentally changing the existing hospital-based curative care medical model. The Primary Care Strategy, principally through its flagship program—the Family Health Strategy (FHS), established multidisciplinary teams of health professionals who are responsible for a defined territory and population with whom they establish contact and share responsibility for health care. The family health teams are the point of entry into the health system, including through home visits, and are responsible for health promotion activities, as well as sectoral and intersectoral actions to control risk factors in the community.

The following important reforms were introduced through the FHS: (a) federal transfers to municipalities to finance primary health were made on the basis of a per-capita fixed amount plus a variable amount, which incentivized expansion of the program (for example, population coverage, number of health teams); (b) explicit agreements were signed between the spheres of government outlining roles and responsibilities, program indicators, and targets; (c) continuous monitoring of performance indicators and increasingly greater transparency by making results available to the public to promote accountability; and (d) municipalities that implement the program were able to alleviate human-resource constraints by using contract workers, circumventing budgetary restrictions to enlarge the civil servant payroll. Although the program did not formally target the poor, its expansion prioritized extension of coverage and improved access for low-income and vulnerable groups. By identifying at home and in the community those in need of care who were not previously seeking services, it also de facto targeted this vulnerable group.

A number of studies point to the effectiveness of the FHS and its success in reaching the poor. However, a few challenges remain going forth. First, the program appears to have reached a plateau, covering approximately 100 million people. The government is implementing programs to strengthen horizontal and vertical integration across levels of the service delivery network, and to improve the quality of primary care, which may resolve current shortcomings and eventually lead to increased utilization of lower-level services. However, the role of publicly provided primary care in some areas—for instance, where the private sector covers over 30 percent of the population—may need to be revisited. The issue of complementarity of the public and private subsystems goes well beyond primary care and will need to be addressed from a broader perspective. Other broad system issues that are unresolved and impact primary care are the lack

of transparent processes for inclusion or exclusion of interventions provided under the SUS and the use of contracted health professional, an issue that has come under increasing legal and political scrutiny.

1. Introduction

The last two decades have been a period of healthy growth accompanied by marked improvements in living standards in Brazil. While economic growth, which averaged 3.2 percent per year during this period, may not have matched the pace of the 1960s and 1970s (when the economy grew at an average annual rate of 6.6 percent), gains in many socioeconomic indicators have been unprecedented (World Bank 2012). The proportion of the population living in extreme poverty (US\$1 a day) was reduced by nearly two-thirds from 17.2 percent in 1990 to 6.1 percent in 2009; an even greater decline occurred in the under-five child mortality rate (from 58 deaths per 1,000 live births to 16 deaths per 1,000 live births); the prevalence of underweight children was halved (from 4.5 percent to 2.2 percent); and the proportion of the population without access to improved drinking water sources declined by three-quarters, from 11 percent to less than 3 percent (United Nations 2012). After a period of stagnation, possibly due to improvements in reporting, maternal mortality is once again on the decline. Life expectancy at birth was 73.5 years in 2010, which compares favorably with countries in its income group (see Annex 1).

This progress has been achieved, in part, through development strategies focused on investments in the social sectors, including during periods of austerity or financial crisis when key health and education programs were protected from severe budget cuts.² These investments included implementation of targeted social programs, such as the conditional cash transfer program, Bolsa Familia, and broad overarching reforms such as those witnessed in the health sector. Since the 1988 constitution, which established access to health care as a citizen right and an obligation of the state, this principle has been gradually translated into practice through a series of successive reforms, starting with creation of the Unified Health System (Sistema Único de Saúde, SUS), a national health system financed by general taxes to which the entire population is entitled. The Primary Care Strategy (PCS), which is the subject of this case study, has been a cornerstone of the SUS.

A number of assessments of the SUS have been carried out over the years. They generally point to significant achievements in improving access and contributing to bringing Brazil from lagging behind its peers in terms of health indicators to being a good performer. The studies also point to shortcomings regarding persistent inefficiencies, particularly in hospital care, remaining gaps in coverage, and fragmentation of the system (Gagnolati et al. 2012). There is a broad consensus, however, that the PCS has been successful.

This case study assesses the key features and the achievements and challenges of Brazil's PCS and analyzes the contribution of this strategy to the establishment and implementation of universal coverage. Section 2 provides context for the discussion by summarizing key reforms and the impact of the PCS and describes Brazil's health care delivery and financing system. The institutional architecture and interaction of the health care program (HCP), in this case the PCS, is discussed in section 3. Sections 4 through 8 outline the main features of the strategy, including the identification and targeting of beneficiaries, management of public funds, services covered, and the information environment. The case study concludes with a discussion of lessons learned (section 9) and the pending agenda (section 10).

² The Family Health Strategy and Community Health Program were among the protected programs.

2. Background on Health System Reforms

Universal health coverage in Brazil is a feature borne out of the pursuit of democracy and social rights. The political struggle to re-democratize Brazil was accompanied by a struggle to reclaim social rights (to health, education, better living conditions, and a community voice), which had been alienated or neglected under the military regime (1964–85). Universal coverage and decentralization were flagship principles of the politically influential “public health movement” and a central claim of many pro-democracy social movements (Faletti 2006).

In the early 1980s, the public system was fragmented into several independent and parallel subsystems (figure 1). The Instituto Nacional de Assistência Médica da Previdência Social (INAMPS) (the medical care arm of the Social Security Institute) was the main player, providing coverage for curative services to employees of the largely urban formal sector, although efforts were made to expand coverage, for example, to rural and domestic workers. The Ministry of Health (MOH) focused on public health (mostly through national immunization “campaigns”) and vertical disease programs that were not integrated with the service delivery system. The MOH managed a few hospitals, concentrated in the formal capital Rio de Janeiro, while state governments and larger municipalities operated their own facility networks, which were open to everyone but catered mostly to the poor, who also relied on the services provided by a large number of nonprofit institutions. The Ministry of Education ran a number of university hospitals, which were managed as departments of the universities. This uncoordinated nonsystem left large segments of the population uncovered, such as the unemployed and informal sector workers, and resulted in important duplications and inefficiencies, namely a centralized medical model focused on curative care that did not adequately respond to the needs of the population; cost escalation due to the increasing complexity of the hospital-centered delivery system and payment mechanisms to private providers on a fee-for-service basis; and redirection of resources to cover deficits elsewhere in the social security system as well as other federal expenditures (CONASS 2011).

Health reforms, which were started in the 1980s and enshrined in the 1988 constitution, were aimed at addressing these shortcomings. The constitution, which defined health as a citizen’s right and an obligation of the state, created the Unified Health System (Sistema Único de Saúde, SUS), whose main objective and achievement was to unify these disparate subsystems into one national health system to which the entire population is entitled, under MOH coordination. The constitution, and subsequent amendments, municipalized health services, established social control through community participation, and codified financial contributions for health at each level of government (see Annex 2 for a graphic depiction of the decentralized national health system). Today, nearly 70 percent of the Brazilian population uses either only or mainly the SUS for health care (figure 1).

Figure 1 Health Care Use by Coverage System in 1981 and Use of the SUS in 2012



Sources: IBGE (PNAD 1981); Pesquisa CNI and IBOPE (2012) from Gragnolati et al. (2012).

Primary care and public health had always been a major weakness of the Brazilian health system, mostly characterized by a heavy bias toward curative and hospital, care as stated earlier. Starting in the early 1990s and consolidated in the second half of the decade, a subsequent phase of reforms reorganized and strengthened primary care through the Family Health Program (Programa Saúde da Família, later renamed as the Family Health Strategy [FHS])³ and the Community Health Agents Program (Programa de Agentes Comunitários de Saúde [PACS]), including financing mechanisms to fund this reorganization. Public health activities and programs were also significantly strengthened and improved: immunization coverage doubled, to reach 98 percent in 2000; disease control and sanitary surveillance were greatly improved, the latter through the creation in 1998 of a strong national agency, the National Health Surveillance Agency (Agência Nacional de Vigilância Sanitária). The success of the Brazilian strategy against HIV/AIDS was based to a great extent on widely disseminated and effective media campaigns (the other pillar being the early free distribution of antiretroviral therapy).

In the current phase of reforms, starting in the 2000s, new regulations and guidelines were issued that sought to strengthen care management through regionalization of the SUS to address challenges in coordination across levels of care, a downside of decentralization of service delivery, and to strengthen management, efficiency, and accountability through the establishment of explicit management contracts and results-based payment mechanisms, specifying coverage targets, among other performance indicators.⁴

While the “public health movement” strongly supported public financing and provision of health care, there was the counterbalancing force of the private health sector lobby. The 1988 constitution, which foresees both public and private provision and financing, represents a political compromise (Faletti et al.). The Brazilian system today remains pluralistic, with reliance

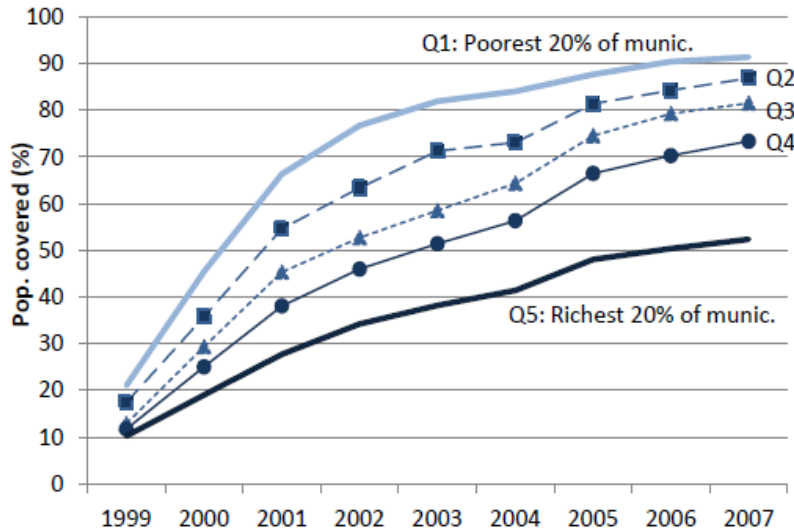
³ For consistency, we will use only the current name, Family Health Strategy, throughout this document.

⁴ Some management and payment models had been designed and implemented earlier at the state level, such as the Social Organizations of São Paulo, in the late 1990s.

on SUS or private providers varying significantly depending on the type of service needed. It is higher at the two extremes of the service spectrum: public health and preventive care, and complex, expensive services.

While technical questions regarding the interface between the subsectors were never explicitly addressed, a review of implementation of the SUS, and particularly of the Primary Care Strategy, reveal a pragmatic approach of prioritizing public resources to expand access to the lower-income segments of the population. The scaling up of the FHS, a flagship program of the broader PCS, illustrates how poor municipalities were given preference over wealthier ones (figure 2).

Figure 2 Expansion of the Family Health Strategy by Income Quintiles

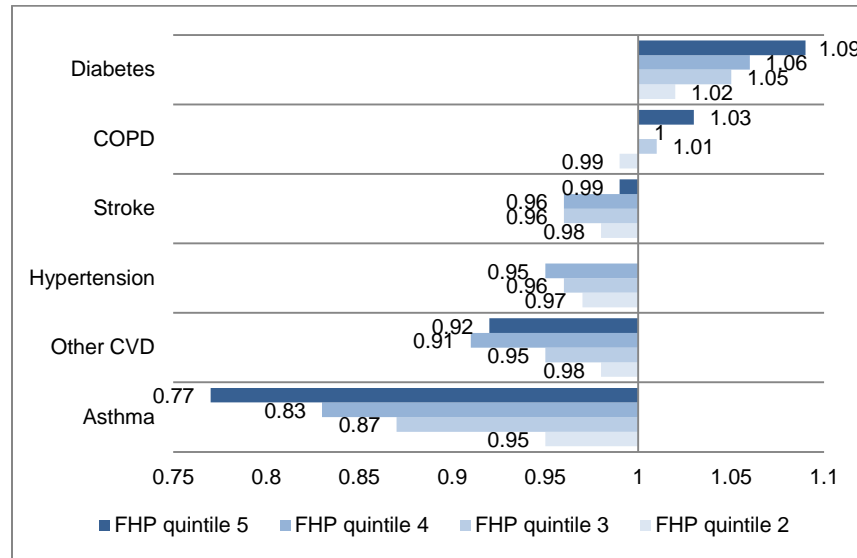


Sources: Mackinko (2011) from DataSUS (MOH) in Gagnolati et al. (2012).

Several studies point to the effectiveness of the FHS. Macinko et al. (2006) state that a 10 percent increase in coverage of the program was associated with a statistically significant 4.5 percent decrease in the infant mortality rate, controlling for other determinants. Rocha and Soares (2010) show that the program had a positive impact on reducing mortality throughout the age distribution, and was associated with reduced fertility, improved school enrolment, and increased labor supply of adults. Macinko (2011) demonstrated that higher coverage rates of the FHS were associated with a greater reduction in avoidable hospitalizations for a number of important chronic diseases, although not diabetes or chronic obstructive pulmonary disease (figure 3).⁵ Further, Almeida et al. (2012) document a decrease in inequality and inequity in health care utilization since implementation of the SUS.

⁵ A figure lower than 1 represents a reduction in primary care sensitive hospitalizations. The increase in diabetes hospitalization could be attributable to better detection rates in areas with high program coverage.

Figure 3 Expansion of the Family Health Strategy by Income Quintile



Source: Macinko 2011.

Note: Quintile refers to coverage rate of the FHS in the municipality, from highest coverage (quintile 5) to lowest.

It is the success of the FHS in reaching the poor, and its overall effectiveness, that makes it of interest to other countries implementing universal coverage policies and, hence, the subject of this case study. It is, however, important to understand the program as part of the broader system. The next section provides this context.

3. Health Care Delivery and Financing

Brazil has a mixed health system, with a broad variety of financing and provision arrangements. Supply of health services is split into three main subsystems:

- A publicly financed and provided subsystem, which accounts for 65 percent of medical consultations and 35 percent of inpatient care
- A publicly financed but privately provided subsystem, which account for 10 percent of medical consultations and 27 percent of inpatient care
- A privately financed and provided subsystem, which accounts for 25 percent of medical consultations⁶ and 38 percent of inpatient care; most of these services are funded through private insurance schemes.

Primary care and public health services are mostly the responsibility of the public system—the Unified Health System (SUS), although a significant number of nonspecialized outpatient care visits are provided by the private sector (though it is not, strictly speaking, organized as primary health care). Following the decentralization of health care provision under SUS, most primary care (84 percent) is now provided by municipal governments. Some primary care services are

⁶ Private ambulatory care does not include medical consultations provided under solo practice, for which no information is available.

insufficiently supplied by the SUS; as much as 70 percent of dental care, for instance, is privately financed.

Specialist care and diagnostic services, though covered under the SUS, are services for which the population relies heavily on the private sector. This is in part due to availability, which is concentrated in larger municipalities and urban centers, particularly for highly specialized care. Tapping into the delivery capacity available in the private sector is constrained by the SUS payment schedule, which is considered insufficient. Weak gatekeeping and poor referral and counterreferral systems contribute to ineffective access to public services, with some patients not able to meet their medical needs while others, who do not have a medical indication, avail themselves of the services.

General hospital care is mostly supplied by the private sector, under contract with SUS (51 percent of hospital beds and 27 percent of inpatient admissions) or under private financing (14 percent of beds and 38 percent of admissions). The public sector accounts for 35 percent of beds and admissions.⁷ Under the SUS, secondary care is usually the responsibility of state governments and larger municipalities; the MOH and the Ministry of Education retain about 100 large referral and teaching hospitals.

At the other end of the service spectrum, expensive and complex **tertiary care** is provided mainly by the SUS, with a few private hospitals (mostly under private financing) also providing tertiary-level services. The SUS is almost the sole provider of services such as organ transplants and HIV/AIDS treatment. However, tertiary-level diagnostic services are provided mostly by private providers and public teaching hospitals.

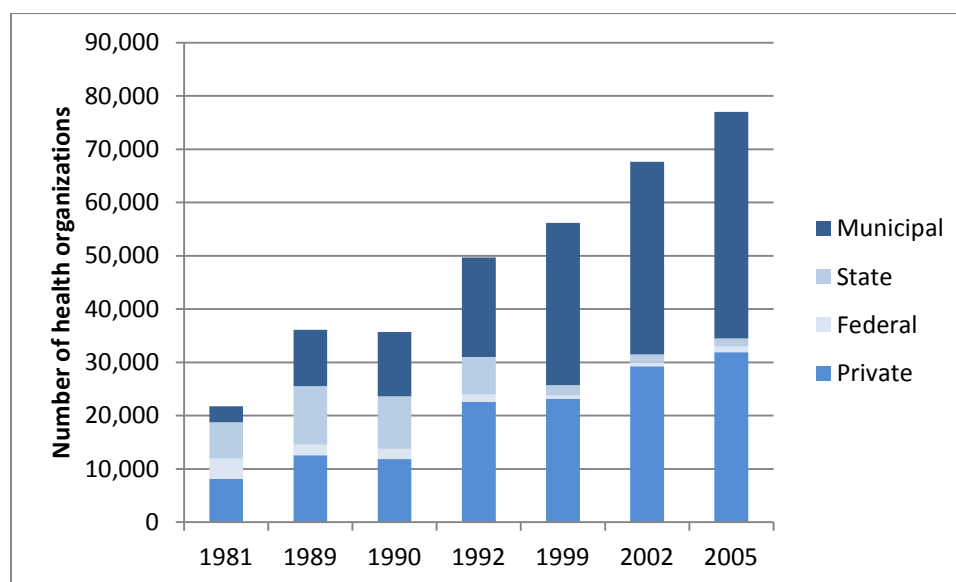
A good example of SUS presence in the high-end scope of services is InCor (the Heart Institute in São Paulo), the most renowned cardiac surgery hospital in the country. InCor is owned and operated by the state government of São Paulo as part of the large Hospital das Clínicas complex, formerly attached to the Medical School of the University of São Paulo. It is funded from the state government's budget; SUS federal transfers; and supplementary income from private patients, research grants, and donations. This diversification of funding sources was made possible by the creation of a supporting foundation (the Zerbini Foundation), which allowed for significant autonomy in revenue raising and resource allocation and was instrumental in ensuring excellence and financial sustainability of the hospital.

The structure of health care delivery and financing in Brazil must be understood in the context of decentralization, which started with the democratization process of the 1980s, was consolidated in the 1988 constitution, and was further refined through administrative rules issued in the early 1990s. The municipalization of the public health system in this period is apparent (figure 4); while the federal and state network shrank, the municipal network quadrupled between 1989 and 2005, outstripping the rate of growth of the private sector (Mori Sarti et al. 2012). Although most of the country and its population is now within reach of a public health facility, access problems remain in some remote areas, especially in the Amazon region and remote rural areas. Overall, only 5 percent of the population report not being able to obtain the care they needed (IBGE,

⁷ It would be erroneous to make efficiency inferences about public or private hospitals, either publicly or privately funded, based on these figures due to differences in case mix, among other factors.

PNAD 2008), and fewer still report physical and geographic access obstacles as the main reason.⁸

Figure 4 Evolution of the Service Delivery Network by Ownership, 1981–2005

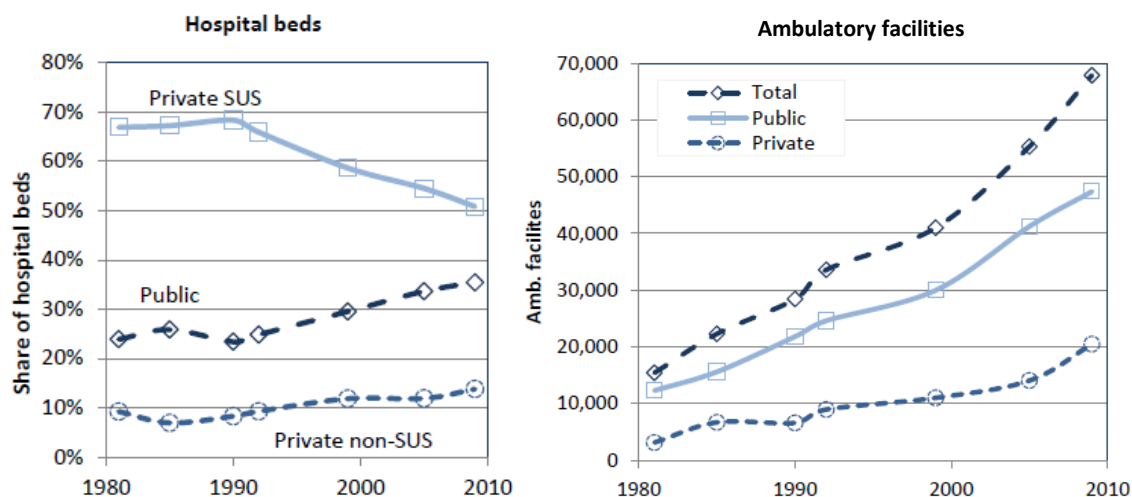


Sources: DataSUS (2008) from Mori Sarti et al. 2012; and authors' calculation from Arretche 2004.

Over the same period, investments in new infrastructure have favored the ambulatory care network, leaving the overall number of hospitals unchanged. This has led to a decline in density of hospitals and hospital beds relative to ambulatory facilities (Gragnoleti et al. 2012). These changes are not accidental. They reflect a move away from the existing hospital-centric, curative care model toward one that promotes the use of primary care. Also, since the early 1980s, the contribution of the publicly financed but privately provided subsystem has decreased steadily in favor of public finance and provision. Nonetheless, the private sector remains an important player both within the SUS (mostly in its not-for-profit modality) and in the privately funded subsector.

⁸ Several recent programs have focused on bridging this gap, including the Health in Frontier Areas and Health in Indigenous Areas programs, and a World Bank-supported project to set up health care networks in the Western part of the Amazon region.

Figure 5 Evolution of the Service Delivery Network by Type of Facility, 1981–2010

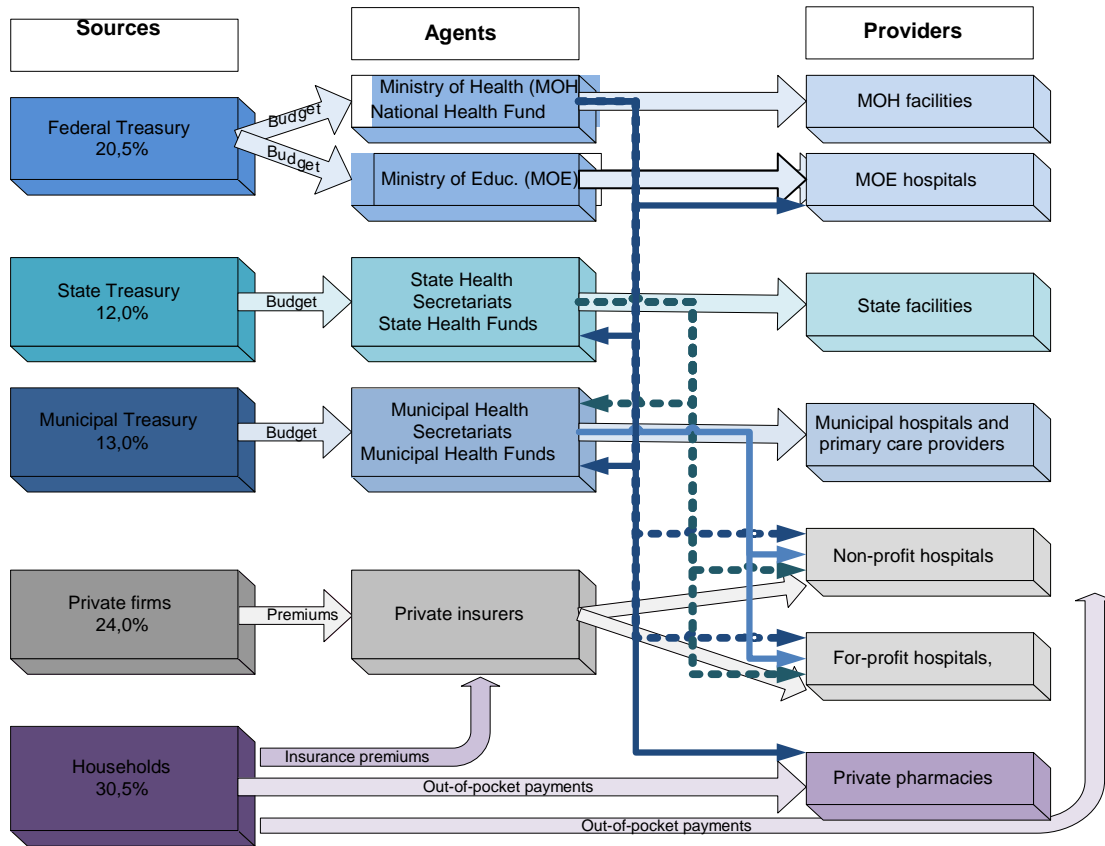


Source: Gragnolati et al. 2012.

The financing pattern of the Brazilian health sector is rather complex, because of the multiple financing and provision arrangements in place. In spite of its size, the SUS accounts for less than 50 percent of total health expenditure in Brazil; private insurance represents about 24 percent and household out-of-pocket expenditure 31 percent (figure 6). The SUS is fully and jointly funded by taxes from the three levels of government, through constitutionally defined contributions for health from the federal (6 to 7 percent of gross revenues), and state and municipal governments (12 and 15 percent of net revenues, respectively). The federal government is the largest funder of SUS, but its contribution has been declining since the early 1980s, from around 70 percent to less than 50 percent in recent years (figure 7). It finances a few large referral hospitals directly owned by the MOH (in addition to 45 teaching hospitals belonging to the Ministry of Education), and cofinances primary and secondary care through transfers to state and municipal governments.⁹ The share of the federal budget spent on subnational transfers has increased dramatically, from less than 8 percent in 1995 to nearly 60 percent today (split 40/60 between state and municipal transfers). States and municipalities contribute similar shares to financing the SUS, around 27 to 28 percent each. Given this joint funding responsibility, financial flows acquire additional complexity to ensure that most—if not all—activities and programs are cofunded by all three levels of government.

⁹ Direct payments to private providers, once a major part of the MOH budget, are now mostly financed by state and municipal governments, out of their own budget and federal transfers.

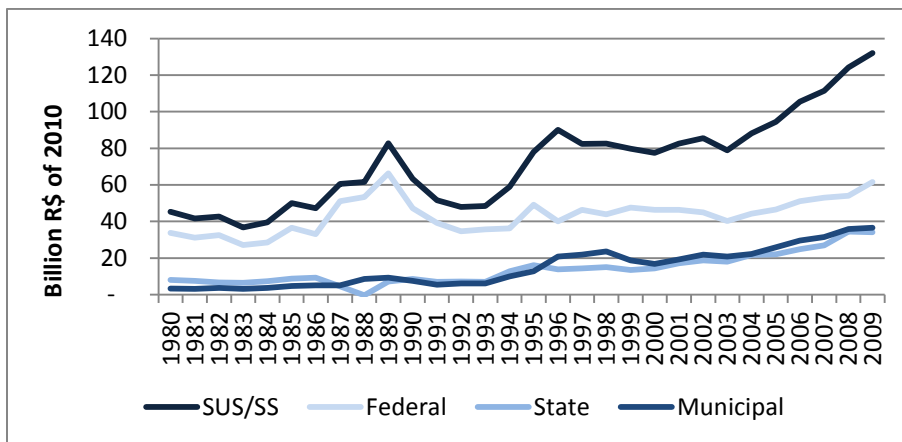
Figure 6 Financing Flows in the Brazilian Health Sector



Source: Author's elaboration.

Note: Large arrows represent budgets and major flows; solid line arrows represent public transfers and payments; dotted line arrows represent small payments.

Figure 7 Evolution of Public Expenditure under Social Security and SUS

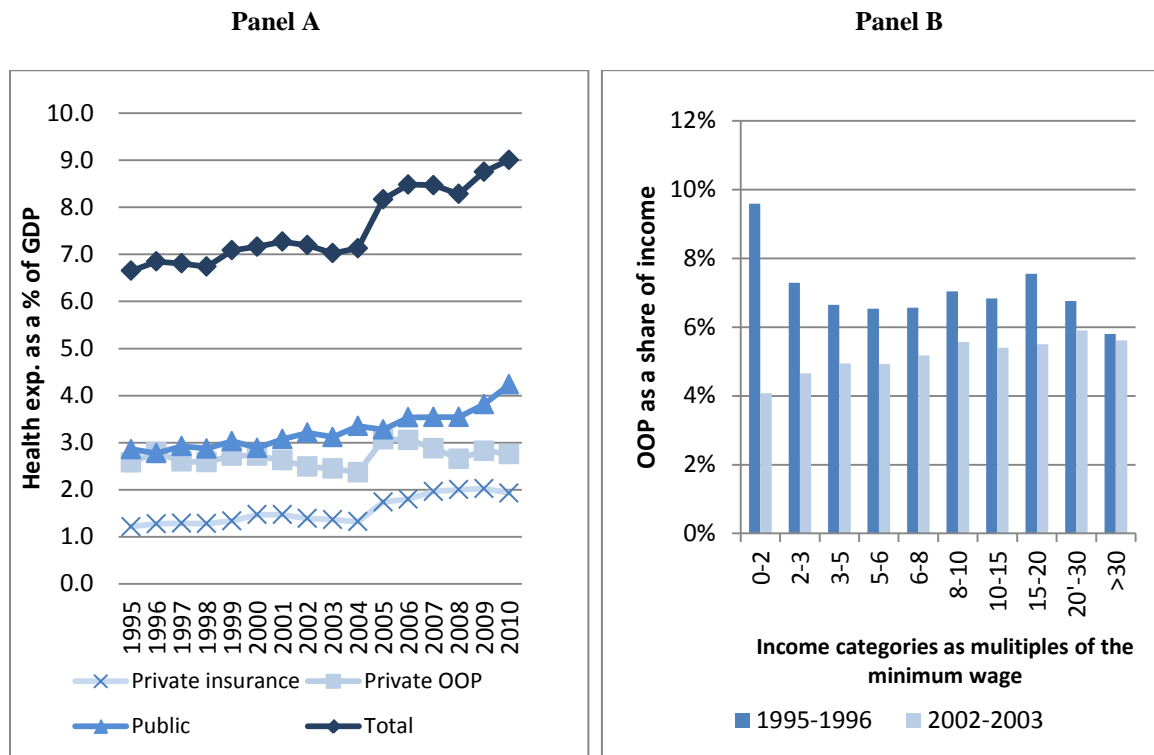


Source: Couttolenc 2011.

Total health expenditures in Brazil today amount to approximately 8.8 percent of gross domestic product (GDP). This share has been increasing over time, driven by the rise in public expenditures and spending on private insurance. While out-of-pocket payments for health overall

have not changed substantially during this period, it is notable that the burden on households in the lower end of the income distribution have been significantly reduced (figure 8). Only 2.2 percent of households in Brazil incur catastrophic health expenditures (at the 30 percent threshold), which is lower than all but one of the 12 Latin American and Caribbean countries analyzed by Knaul et al. (2012).

Figure 8 Evolution of Health Expenditures



Sources: WHO National Health Accounts database; IBGE 1991, 1998, 2004.

Note: OOP = out-of-pocket payments.

4. Institutional Architecture and Interaction of HCP with the Rest of the Health System

Beginning in the early 1990s and strengthened after 1994, a new strategy for reorganizing primary care centered on a family health approach, and outreach activities were gradually but swiftly deployed. This strategy was based on four main integrated components:

- The deployment of a new, outreach-based approach to primary care, through the Community Health Agents Program (PACS) from 1991—which was rapidly expanded from the pilot areas in the Northeast to the rest of the country (reaching 100 million people or 53 percent of the population by 2009)—and, starting in 1994, of the FHS.
- The adoption of innovative payment mechanisms to finance primary care, partially linked to coverage targets and other performance indicators. These new provider payment mechanisms provided strong incentives for state and municipal governments to rapidly expand primary care services.

- The definition of a comprehensive package of services, including the provision of essential drugs through the Basic Drugs Program (Farmácia Básica) and the more recent Popular Pharmacy Program (Farmácia Popular, which requires copayment), and dental care.
- Specific programs focusing on particularly vulnerable populations, such as indigenous groups, at-risk youth, and inmates.

The SUS invested heavily in the expansion of the network of public facilities as part of the strategy for extending access to primary care (see the previous section).

The PCS is grounded on the SUS's principles of universality, integrality, equity, and social participation, and implemented in the context of decentralization; that is, responsibility for its execution is shared among the three spheres of government. The key features of the PCS, and particularly of the FHS that is at its center, are (a) delineation of a defined territory for programmatic and planning purposes and for the development of sectoral and intersectoral actions that impact risk factors and health determinants at the community level; (b) designation of family health teams as the preferred point of entry into the health system, responsible for resolving the bulk of health care needs or following the patient as he or she is referred to higher levels of care; (c) delineation of the population with whom the family health team is to establish direct contact, creating a co-responsibility between health professionals, individual users, and the community for health care; (d) organization based on multiprofessional and interdisciplinary family health teams charged with delivering patient-centered care, under integrated management, coordinating health care, health promotion, public health, and surveillance activities; and (e) family health teams responsible for promoting user and community participation in resolving health problems and in shaping health services that are responsive to their needs (Administrative Rule N° 2.488/October 21, 2011).

The PCS has a much broader objective than coverage or access expansion. It is a fundamental change in the delivery model away from the curative-, disease-, and procedure-centered approach, segmented across vertical programs, health professions, and specialties, that passively relied on patients to come to the facility, to one that actively seeks the population in need of care, through community outreach and home visits. It aimed at identifying and treating common diseases affecting the population, identifying and managing health risks, monitoring health status, and providing timely preventive or curative care and expanding access to essential services.

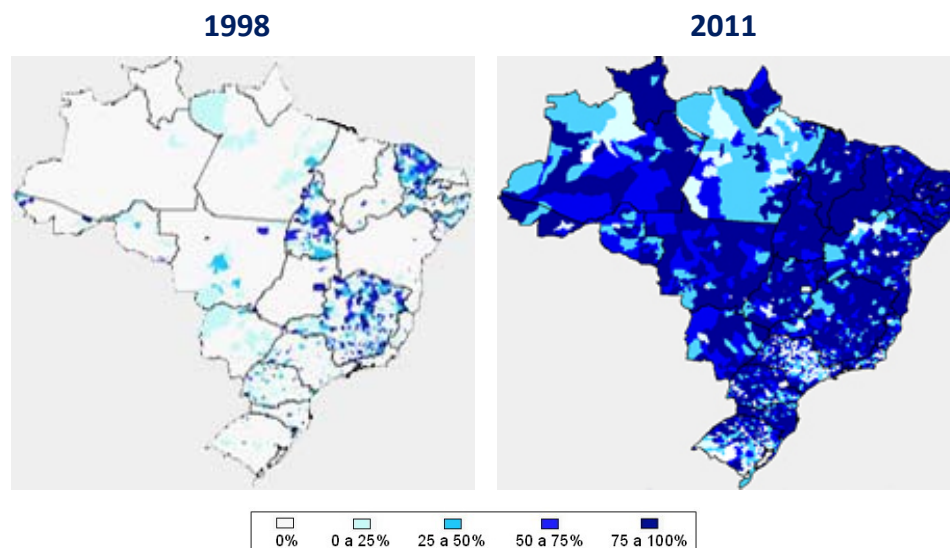
The centerpiece of the strategy is the FHS, which became the key program to reorganize and strengthen primary care. It is based on multiprofessional family health teams of usually six to 10 professionals (a family health physician or generalist, a nurse, nursing assistant, four to six community health workers,¹⁰ and in some cases dentist health professionals) operating from a health center or family health center but providing mostly outreach activities through regular home visits to every family in the team's coverage area. Family health teams are responsible for providing first contact, comprehensive, and whole-person care coordinated with other health services. Each team is assigned around 1,000 households (or up to 4,000 people, with the

¹⁰ The number of community health workers varies depending on the size and needs of the population or territory but cannot exceed 12 per family health team. Each community health worker is responsible for at most 750 people.

recommended average being 3,000 per team)¹¹ within a given geographic area, and should register every family in the area; assess and monitor living conditions, health risks, and health status; and provide first-level preventive and curative care. Upon the need for additional health services, the team interacts with other health professionals at the facility or refers the patient to higher-level services.

Another fundamental change brought about by the reform to the primary care system was the manner in which the program was financed. Regulations enacted in 1996 replaced the fee-based schedule for federal reimbursement of primary care interventions delivered by states and municipalities with a capitation system (the *Piso da Atenção Básica* fixo [fixed PAB]) and an incentive-based payment (the variable PAB) to promote implementation of priority programs such as the FHS and PACS among others—although these two programs account for the lion’s share of resources. This explains the rapid expansion of the FHS, particularly since 1999 when new norms established that the variable PAB amount would be based on the FHS’s population coverage (figure 9). Expansion was also facilitated by the fact that family health teams could be hired under contract, alleviating the human resources bottleneck that would have existed had municipalities been constrained to hiring civil servants.¹² Importantly, it also allowed the MOH to maintain stewardship over a highly decentralized system. Section 6 discusses management arrangements in greater detail.

Figure 9 Expansion of Coverage of the FHS



Source: MOH/Department of Primary Health (DAB).

The PCS also had an impact on the way the overall health system operates. By changing the way primary care is organized and provided, and substantially shifting the country away from the

¹¹ The number of individuals covered per FHS team is left to the discretion of the municipality, but the PCS recommends that vulnerability of the population be used as a criterion, with teams having responsibility for fewer people where their degree of vulnerability is greater.

¹² This was particularly true in the late 1990s, when Brazil was undergoing a period of increased fiscal austerity, including contraction to recurrent public spending, in an effort to stabilize macroeconomic indicators (the *Plano Real*).

curative, hospital-centric approach to care previously prevalent in Brazil, the PCS had repercussions elsewhere in the system (for example, the reduction in density of hospitals and hospital beds discussed in the previous section). However, its impact on the higher levels of care has been limited by the weak integration between the FHS and secondary and tertiary services.

In spite of progress over the last decade in reorganizing and strengthening primary care provision, coordination of care still represents an important weakness of both the SUS and the private sector. The SUS has put in place several mechanisms to ensure health planning coordination, but efforts to promote care coordination itself are recent and of limited effectiveness thus far. Health committees and councils have been formed at all levels of the system; regional or local bed and referral management units (Centrais de Regulação) have been established, and referral guidelines are in place. But these regulations are not very effective or enforced—though there is variation across the country, with some states making considerable progress (for example, São Paulo and Santa Catarina). There is no gatekeeping mechanism, although FHS is supposed to play that role. Moreover, with few exceptions, (for instance, in Minas Gerais, Curitiba, Aracajú), effective, integrated health care networks are not in place. In December 2010, the MOH launched a policy to address existing weaknesses and establish horizontally and vertically integrated regional networks, with primary care at its center. Progress, however, has been slow in view of the complexity of the task.

5. Targeting, Identification, and Enrolment of Beneficiaries

The goal of expanding and improving coverage to the poor was a key element of the 1980s reforms leading to the establishment universal coverage and the SUS in the 1988 constitution. The broader political aim was to reduce inequalities and ensure the universal right to health. Differently from many other developing countries, coverage expansion was built as a fundamental objective into the main public health system rather than the focus of separate programs. However, several programs have been instrumental in extending or improving access to essential services: the FHS and the more recent Popular Pharmacy Program.

The SUS does have several programs focusing on or prioritizing the poor or vulnerable, including the Program for Health in Frontier Areas and the Program for Health of Indigenous Peoples. In these cases and others, the poor are targeted by focusing on specific, previously underserved, geographic areas with a high level of poverty. The same is true for the PCS (and its FHS component); this is a national, nontargeted program that has prioritized the poor by focusing on expanding first in rural and poor urban areas of the Northeast and Northern regions, where most of the population is low income (see figure 2, above). But there is no intention of or mechanism for discriminating among users based on income or other criteria; primary care is a universal program accessible to everyone irrespective of income or socioeconomic status. As will be discussed in greater detail in the next section, federal transfers to finance primary care did take into account the level of vulnerability of municipalities.

Studies have provided substantial evidence of the propoor focus of FHS (Macinko 2011). FHS was also deployed in middle-income neighborhoods of urban areas (although these have not been prioritized). Another way in which the FHS indirectly targets the poor is through its actions at the community and household level by identifying medically at-risk individuals who were not

previously seeking care, and who are more likely to be poor, and bringing them into the care network. Prioritizing the poor may also happen indirectly, by self-selection: higher-income families are unlikely to use the program because they may not want to be identified as poor or “SUS users.”

There are, however, a number of social programs in Brazil, some with health components, such as the Bolsa Família, that do directly target the poor. At the end of the 1990s, the Brazilian government began to give financial transfers to low-income families, conditional on children attending school. This original school grant (Bolsa Escola), together with other focused grants (for cooking gas, for example), were later merged into the well-known Bolsa Família, which was greatly expanded to the point of covering about 13 million families (40 million individuals). The benefit goes to families earning less than R\$140.00 (US\$80) per capita per month. Cash transfers are conditional on utilization of defined health, education, and social services. The program has been regarded as very successful in reducing poverty, having managed or contributed to raising millions of people out of poverty.

Linked to Bolsa Família, a national registry of low-income families (those with a total income below three minimum wages or per capita income below one-half the minimum wage), CadÚnico has been developed and is used by the federal and subnational governments for targeting social programs. It is the only national register of poor families, and is used for determining and monitoring cash transfers within Bolsa Família, and targeting of other social programs (for example, the low-income housing program Minha Casa Minha Vida).

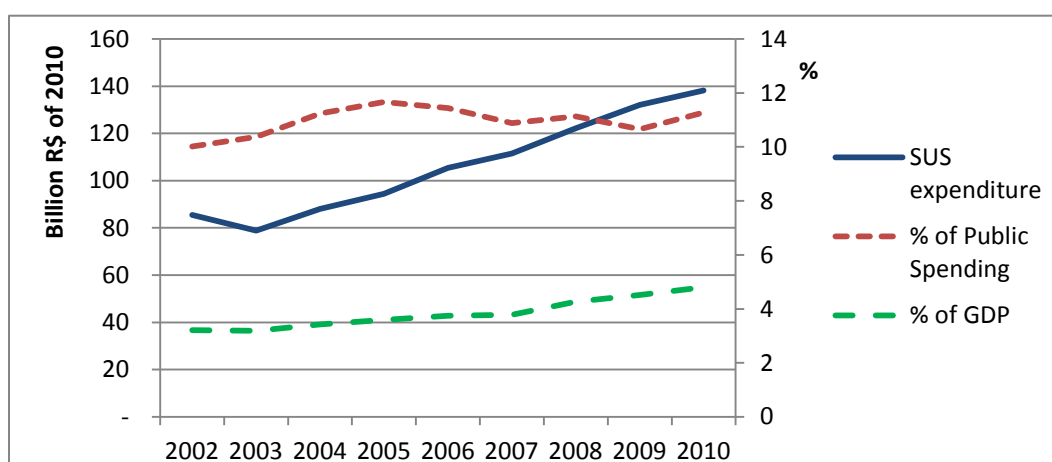
Although Bolsa Família has specific conditionalities linked to health, there is no formal linkage between that program and health care provision within the SUS, and no evidence that this system has been used for targeting health services to the poor. Poor families are identified in the MOH information system only within the scope of the health services that are a conditionality for cash transfers under Bolsa Família (vaccination of children under age 7, growth-monitoring visits, pre- and postnatal visits, well-baby visits, and breastfeeding and nutrition educational activities). Outside of this narrow scope, the MOH does not use the CadÚnico, and its own information systems do not identify individuals by income level. In particular, PCS (including FHS) does not use the existing CadÚnico for identifying the poor, nor does it target poor households directly. As will be explained below, a change was introduced in 2012; the percentage of the population in the municipality that are beneficiaries of Bolsa Família or are extremely poor, whichever is lowest, is now used as a criterion to determine the size of the fixed PAB, with poor municipalities receiving a larger per capita transfer.

Identification of low-income or vulnerable families can be done in two ways in Brazil. Regular household surveys conducted by the Brazilian Institute for Statistics and Geography (IBGE) allow characterization and general identification of low-income families. These surveys include Pesquisa Nacional por Amostra de Domicílio (PNAD), a yearly national survey of socioeconomic conditions, employment, and income of Brazilian households; and Pesquisa de Orçamento Familiar (POF), a household budget survey conducted every four to five years. However, these surveys are not used to identify the poor individually. Insofar as they are used by IBGE to identify the extremely poor and the municipality's per capita income, they do enter into the calculation of the fixed PAB as of 2012.

6. Special Topics Related to the Management of Public Funds in the HCP

Since 2002, SUS expenditure has increased significantly, both in constant value and in proportion of GDP, which grew from 3.2 percent in 2002 to over 4 percent in 2010 (figure 10). As a proportion of total government spending, however, SUS spending has oscillated without a clear trend, mostly because total government expenditure has also grown rapidly over the period. This steady and sustained increase in public expenditure on health since 2002 represents a significant change from the 1990s, when SUS spending oscillated widely following economic cycles, but increased little in real terms.¹³

Figure 10 Trend in SUS Expenditure, 2000–10



Sources: Author's elaboration based on MOH/SIOPS data, IBGE (for GDP), and Ministério da Fazenda/STN (for public expenditure).

This recent increase in the SUS is reflected in the funding of most of its programs; primary care benefited especially, since its prioritization is reflected in a larger proportion of public budgets allocated to it (table 1). As a proportion of GDP, PCS spending increased over 50 percent, to nearly 1.5 percent.

Table 1 Expenditure on Primary Care in Current Value and Relative Terms, 2002–10

Year	Total PCS Expenditures in Million R\$	As % of Public Health Expenditures	As % of Total Public Expenditures	As % of GDP
2002	11,955.85	25.16	2.52	0.81
2003	13,969.38	25.74	2.67	0.82
2004	17,615.41	26.52	2.98	0.91
2005	19,651.53	25.49	2.97	0.92
2006	21,071.79	24.14	2.76	0.90
2007	27,044.27	28.00	3.05	1.06
2008	30,735.80	27.03	3.01	1.15

¹³ It was only in 2001 that SUS expenditure reached the level of 1989 in real terms.

2009	33,672.36	26.93	2.87	1.22
2010	41,830.36	30.28	3.41	1.45

Sources: Author's elaboration based on MOH/SIOPS, IBGE, MF/STN.

Note: Expenditure (in current million R\$) includes FHS, PACS, PAB, Basic Pharmacy and other primary health care programs.

Similarly to the SUS as a whole, PCS is cofunded by the federal, state, and municipal governments (table 2). Municipalities are the main financial contributors and are responsible for its execution. The MOH contributes about one-quarter—much more in the case of FHS specifically—through federal transfers to municipal and state governments. The World Bank has supported the FHS, but the amount provided was small compared to the program's total expenditure. For nearly all SUS programs, there are no copayments or financial contributions from patients or users.¹⁴

Table 2 SUS Expenditure on Primary Care in 2010 by Source

	Million R\$	Percent of Total
Total expenditures in PCS in 2010	41,830	100.00
Government Funding	41,830	100.00
- Of which		
- Central government	10,691	25.56
- Payroll taxes/Social Security contributions	0	0
- Subnational government – states	3,765	9.00
- Subnational Governments – municipalities	27,375	65.44
- Arrears		
Beneficiaries	0	0
- Of which	0	
- Point of service payments (copayments, user fees, etc.)	0	0
- Registration fees	0	0
- Premium contributions	0	0
- Others (describe)	0	0
External Donor Contributions	81.75 ^a	(0.20)
Others (describe)		

Source: Author's elaboration from MOH/SIOPS budget.

Note: a. Included in central government.

Most federal funding for the PCS is in the form of transfers to states and municipalities; state governments also make substantial transfers to municipalities to finance FHS. Federal transfers include two broad components: a fixed per capita amount (the fixed PAB) and a variable part (variable PAB) linked to achieving program targets agreed in the intergovernmental Agreement on Primary Care (Pacto de Atenção Básica), including population coverage of the FHS. Today, the variable PAB is based on the number of FHS teams implemented in each municipality or state.

In 2012, the variable PAB, which is the largest share of federal transfers to municipalities, was set at approximately US\$3,500 to US\$5,400 per family health team per month for 12 months,

¹⁴ The only exception so far is the Popular Pharmacy Program, where copayments are an integral feature of the program.

US\$1,100 to US\$1,500 per dental health team per month for 12 months, and US\$430 per community health worker per month for 13 installments. Whether a municipality receives the higher or lower amount depends on its size and level of vulnerability, which is determined by its score on the Human Development Index; more vulnerable municipalities receive the larger sum. The fixed PAB was between US\$9.00 and US\$11.50 per capita per year in 2012. An important change was introduced that year: the amount transferred was set at four different levels. The per capita amount a municipality receives now depends on its composite score on four measures: (a) per capita income (normalized on a scale from 0 to 10, with higher income corresponding to a higher score), (b) share of population that is not a Bolsa Família beneficiary or is not classified as extreme poverty (whichever is lowest), (c) percentage of the population with private insurance coverage, and (d) population density (normalized similarly to income per capita). Higher scores translate into a lower per capita fixed PAB. The inclusion of private insurance coverage as a criterion is particularly interesting; it could be interpreted as recognition of the complementarity of the public and private subsystems.

The PAB is transferred from the National Health Fund to the Municipal Health Fund (see Annex 2). Before the variable PAB can be transferred, municipalities must develop a proposal for implementation or expansion of the FHS, which has to be approved by the Municipal Health Council (which includes representatives from civil society) and the State Health Secretary, and evaluated by the Bipartite Management Committee prior to being validated by the Ministry of Health. Municipalities must also register the family health teams and populate the health management and information system with data. Failure to do so can lead to suspension of transfers. Fund utilization must also comply with federal and state public financial management rules.

A number of issues have been generating tension between the SUS and the economic ministries (Planning and Finance) regarding financing of the public system as a whole, although not specifically of the PCS. The first issue has been simmering for a long time—since before 1988—and relates to the necessary funding for the health system. SUS authorities and supporters consistently point to the insufficiency of funds as the main source of the system's limitations and difficulties. Several initiatives have been undertaken to significantly expand SUS's financing base. During the 1980s, the SUS attempted to earmark 30 percent of the Social Security budget to finance health; this proposal was never passed into law. In the mid-1990s, a new federal tax on financial transactions, the *Contribuição Provisória sobre Movimentação ou Transmissão de Valores e de Créditos e Direitos de Natureza Financeira* (CPMF), was created to finance the SUS; however, it was never fully allocated to health and was partly negated by a decrease in other sources. In 2000, a constitutional amendment (Imenda Constitutional 29) was passed requiring state and municipal governments to spend a minimum 12 percent and 15 percent, respectively, of their budget on health. Though the amendment was only regulated by norms that defined what could be counted as health expenditures in 2011, it managed to induce a significant increase in subnational funding (which was, however, partly counteracted by a reduction in federal funding). Over the last year, debate has raged in congress on the institution of a new tax to finance health, but the tax was ultimately not approved.

Economic authorities are reluctant to support new taxes for health or to increase allocation to health, partly because SUS has an image of being inefficient and wasteful, and health authorities

find it difficult to make a strong case for increased funding. As a consequence, economic authorities have been pushing for the development of payment mechanisms and governance arrangements that would improve the incentives for greater efficiency in the health system and link funding to some evidence of performance and impact. This has been resisted by a significant portion of SUS authorities and supporters, which often see these initiatives and models as privatization in disguise, and thus contrary to what they see as SUS fundamental values. And in something of a reversal of positions, health authorities and managers are arguing for greater flexibility in budget allocation and management, while the Finance Ministry insists on enforcing current budgetary systems and controls. Ensuring value for money in public spending and greater accountability to the public across all sectors has been a priority of the current administration, and one that is likely to influence the direction of this debate.

7. Management of the HCP's Benefits Package

The PCS provides a comprehensive list of primary care services that are defined based on health conditions (for example, hypertension or deliveries), clinical and nonclinical procedures (for example, immunizations, home visits, health education, nursing care), and target groups (for example, mothers, children, the elderly) (table 3). The list of services provided has evolved over time, with the recent inclusion of treatment and control of hypertension and diabetes. It is defined by the MOH, state and municipal health secretariats, and the National Council of State Health Secretaries (Conselho Nacional de Secretários de Saúde), based on nonexplicit criteria loosely related to cost-effectiveness and health benefits (though no systematic cost-effectiveness assessment is performed). In the case of FHS, the initial cost of the services was estimated at the time when the program was launched, though the methodological approach used was unclear. This cost has not been systematically updated since, although limited costing studies have been undertaken. For primary care as a whole, no costing studies have been undertaken.

No maximum expenditure ceiling is specified for any SUS program, except for a ceiling in the number of hospitalizations per state. However, contracts with hospitals are increasingly being based on target indicators and/or global budgets, although these still apply to a minority of SUS providers (social organizations in São Paulo, teaching hospitals, nonprofit hospitals). Except for the social organizations, in most cases financial ceilings are not rigorously enforced and bailouts of private nonprofit hospitals have been common. No explicit cost-containment approaches are used for the PCS, apart from the availability of funds. As primary health care and FHS grew, funding also expanded and, therefore, did not represent a major restriction. An important restriction, however, was imposed by the Fiscal Responsibility Law, passed in 2000, which regulated the proportion of the budget that could be spent on personnel. As noted earlier, the hiring of contracted employees allowed municipalities to circumvent this constraint to the expansion of the FHS.

Table 3 PCS Benefits Package

Benefits Package Covered by HCP	Covered by HCP? Y/N	Cost-share by Beneficiary? Y/N	Comments
Generally all services are covered under SUS, with no cost-sharing			
Inpatient Services			Covered in SUS, not in PCS
Birth delivery	Under SUS	No	
Emergency services	Under SUS	No	
Other inpatient hospital services	Under SUS	No	
- Hospital component (hotel services, nursing care, disposables, tests)	Id		
- Physician service components	Id		
- Pharmaceuticals	Id		
- MRI	Id		
Outpatient Services			
Public health services, such as immunizations ^a	Yes	No	
Outpatient primary care contacts	Yes	No	Provided within FHS
Outpatient specialist contacts	Under SUS	No	Referral services
Pharmaceuticals for outpatient services	Partly	No	Essential drugs and those for specific diseases are covered and provided at SUS facilities (through the Basic Pharmacy, Popular Pharmacy and NCD programs)
Clinical laboratory tests for outpatient services	Yes (SUS)	No	
Diagnostic imaging for outpatient services – basic (X rays and ultrasound)	Yes (SUS)	No	
Diagnostic imaging for outpatient services – beyond X-rays and ultrasound (e.g., MRI, Cat Scan)	Yes (SUS)	No	
Other services			
Eyeglasses	No	—	
Dental care – basic	Yes	No	
Dental prostheses	No	No	
Mental health/behavioral	Yes	No	At PCS and referral services
Prosthetics and orthotics	Yes (SUS)	No	
Dialysis or transplants	Yes (SUS)	No	
Home-care services	Yes (SUS)		Included recently under SUS
Paid maternity leave (cash benefit)		Yes	From Social Security
Sick leave (cash benefit)		Yes	From Social Security
Funeral Expenditures (cash benefit)		Yes	From Social Security

Source: Author's elaboration from MOH documents and reports.

Note: a. Marked "No" if public health services are available free-of-charge but are paid by another program.

8. The Information Environment of the HCP

In general, SUS's existing information systems are organized by level of care. The Sistema de Informação da Atenção Básica (SIAB) collects information on FHS enrollee health status and use of primary care services, using indicators for specific services and diseases (for example,

maternal and child care, tuberculosis, hypertension, diabetes, and some heart diseases). Separate systems record use of inpatient services (Sistema de Informações Hospitalares, SIH) and specialized ambulatory and diagnostic services (Sistema de Informações Ambulatoriais, SIA). However, these systems are not connected and do not allow tracking of patients across facilities or services. Nor does the SIAB record use of hospital or referral services, except when the FHS teams specifically refer patients to higher levels. SIAB is also used for monitoring achievement of program and coverage targets negotiated and agreed between the three levels of government. These targets are outlined in the Agreement on Primary Care, the Agreement for Health (Pacto pela Saúde), and other annual or multiyear plans. Both SIAB and the pactos define and monitor outcome indicators including, for example, infant mortality, hospitalization rates for stroke and diabetes, cure rate for tuberculosis and Hansen's disease, and AIDS incidence among children under five. Data from these information systems are publicly available on the MOH website.

The many separate information systems in Brazil reflect a high level of fragmentation in health care itself. They are not linked and do not allow for a comprehensive view or tracking of individual patients or population groups across levels and types of services. The SUS card, under implementation, is supposed to resolve the problem by recording every use of SUS facilities or services; however, implementation of the card has been lagging, is limited to certain areas or municipalities and, thus far, it is not clear to what extent it has helped reduce fragmentation in services and information systems.

SUS has over the years built mechanisms to ensure transparency. SIAB and overall FHS information is made publicly available through the MOH and health secretariats websites, and used for social marketing and information campaigns through leaflets and other public documents. The MOH website presents and describes several of its programs, including FHS, for public viewing and use. Most SIAB information is available through online databases, reports and documents, and transparency laws require governments to publicize information. Additional information requests to institutions or departments responsible for particular data are usually answered in a timely fashion. In addition, "transparency portals" have been set up in several ministries and subnational secretariats; however, they are usually of little use, and most information is best available from data portals. More recently, SUS has started scoring municipalities according to a performance index, the Índice de Desempenho do SUS (IDSUS), which measures access and quality of services in primary care, specialized ambulatory care and hospital care, urgency, and emergency. Indicators include coverage of the FHS, and several primary care service indicators such as proportion of newborns with mothers who had seven or more prenatal visits, uterine cancer screening, and cure rates for new tuberculosis cases. The index, which will be published every three years, is widely available and is a tool to promote greater transparency. The FHS plans to eventually publish performance indicators per family health team.

9. Lessons from a Two-pronged Approach to Universal Coverage

The Brazilian Unified Health System was created in the wake of a re-democratization process to resolve three central limitations of the health system in the early 1980s, characterized by fragmentation (several parallel and uncoordinated systems), focus on personal curative care, and large inequalities in coverage and access to care. Twenty years after its establishment in the 1988

constitution, the health system is quite different from its predecessor and much improved in its three main goals. The SUS consolidated all the existing parallel public systems (MOH, Social Security, states, and municipalities) into one coordinated system.

The SUS has managed to balance, though still imperfectly, the decentralized federal structure of the country with the need for system coordination and national policies and priorities through a complex but functional system of intergovernmental negotiation, planning, and financing. It has significantly reorganized and strengthened primary care, thus reversing—although not fully—the long-term curative bias of the Brazilian health system through a consistent set of coordinated programs and innovative payment mechanisms centered on the successful FHS. Finally, it has significantly reduced existing inequalities in access and health status, in a country known for its historically high level of socioeconomic inequities. As a result of this process, Brazil has moved from a laggard in health indicators to a good performer in recent years. Although the SUS itself should not get all the credit for this achievement (improved nutrition, water and sanitation, high income, and lower poverty have played an important part), it has certainly contributed significantly.

Universal coverage lies at the core of SUS design and values, and was a fundamental aspiration of the health reform of the 1980s. However, after 20 years, more than two-thirds of the Brazilian population relies on it for most of their health care needs; almost 25 percent are covered by private insurance, and 10 to 15 percent rely on out-of-pocket payments. Has the SUS failed to achieve the goal of universal coverage? This question has many different answers.

First, from the point of view of the right to health care, every Brazilian is entitled to obtain health care under the SUS, and nearly all of those who seek it are treated (less than 5 percent have a problem obtaining care).¹⁵ Second, those who do not use SUS as their main source of care are likely to use the public system eventually for certain services (such as highly specialized tertiary care), and generally when they do not use the SUS, it is by choice—most users of private health insurance or those who make out-of-pocket payments for health prefer not to use SUS services because they believe quality and/or access is better in the private sector (for example, long waiting times is a source of dissatisfaction for SUS users, although there is little rigorous evidence on how long patients wait for various services). Third, the SUS has prioritized extension of coverage and improving access for low-income and vulnerable groups, without targeting them formally. Every SUS program is open to everyone, but many of the programs, such as the FHS, have prioritized underserved regions and areas, where they were most needed. As a result, variation in public expenditure and health status indicators was greatly reduced across states.

Differently from many countries whose strategy toward universality centered on specific programs targeting previously uncovered population groups, Brazil started by legislating the right to health within a unified public system, and then went on with gradually designing and implementing empirical strategies to operationalize universal coverage and make it effective. The SUS has consistently resisted the idea of targeted programs on the grounds that they would conflict with the fundamental principle of universal coverage. While targeted programs might be

¹⁵ A growing proportion of these do not obtain care because of weaknesses in service management rather than economic or distance barriers (IBGE, PNAD 2008).

more effective in reaching specific population groups, the SUS approach of prioritizing vulnerable groups within a single, universal system has proved reasonably successful, and it has avoided or limited one frequent and important downside of targeting, which is system fragmentation. About one-third of Brazilians do not use the SUS as their regular source of care, but it is more a matter of choice than of coverage. Levels of satisfaction with the SUS are fairly low and quality of care is a constraint (Gragnotatti et al.). Although data on quality of care are limited, studies such as La Forgia and Couttolenc (2008), and the MOH's own assessment, highlight important shortcomings in hospital care.

Regarding primary care, however, a number of studies indicate that the SUS outperforms the traditional facility-based approach (Macinko 2011; Macinko, Almeida and Sa 2007) and point to the effectiveness of the FHS (Macinko et al. 2006; Rocha and Soares 2010) and its efficiency in reducing costly hospitalizations (Macinko 2011). Nonetheless, important inequalities remain in the quality of care accessed by different population groups. For example, Mori Sarti et al. (2012) show that prevalence of chronic disease went from having a propoor pattern to having a prorich pattern when the survey question changed to specify only a medically confirmed diagnosis, indicating that the poor are not being diagnosed at the same rate despite reduced inequality and increased utilization of health services. This is one of the main challenges facing the SUS in the years to come.

10. Pending Agenda

The SUS's substantial achievements were not without difficulties, and are not without qualifications. The SUS still faces a number of challenges, old and new, to its consolidation and further improvement. The pending agenda is likely to include the following issues:

- *Further expansion of the PCS:* The strategy was successful in many aspects, but its core component, the FHS, appears to have reached a plateau at a little over 100 million people, and has been growing much more slowly in recent years. This is partly to be expected since it is harder to make further gains at higher levels of coverage. Expansion in large urban and metropolitan areas has been especially slow. This is likely to be associated with the broader choice of providers patients have in larger urban areas (including, but not limited to, hospital emergency rooms and specialists), and the importance of private health insurance in these areas. The role and features of publicly provided primary care in areas where the private sector covers over 30 percent of the population, as is the case in many large cities, may need to be revised. The recent change to the resource allocation formula, which now favors areas with lower private insurance coverage, is a step in this direction.
- *The FHS teams hiring regime:* Expansion of the program has relied heavily on contracting FHS teams outside the civil service, through short-term contracts with individuals or organizations. In 2006, 75 percent of municipal spending on FHS staff was through such contracts. Since the issue has been of growing concern—and these unstable arrangements, with high turnover linked to election cycles, have been increasingly challenged politically and legally—changes were introduced in the contracting of teams and this proportion dropped to 59 percent in 2010 (Municipal Public Healthcare Budget Information System [known as SIOPS]) data). However, the issue remains to a large

extent unresolved, and may hamper the program's future sustainability and expansion until a long-term solution is found. Many different contracting arrangements have been implemented throughout Brazil's 5,000-plus municipalities. Evidence on the relative performance of alternative arrangements should be a critical input to inform policy decisions in this area.

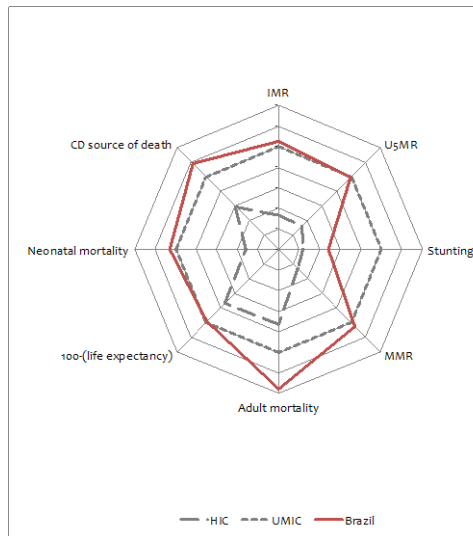
- *Care coordination and integration:* PCS and its core program, the FHS, have been successful in expanding coverage and improving the effectiveness of primary care; however, its effectiveness has been hampered by difficulties in horizontal and vertical integration. FHS teams are not currently able to monitor or follow their patients through secondary or tertiary care, in part due to limitations in the information system and patient records. Referrals to those levels have been recognizably difficult to operationalize and the situation is unlikely to change until referral systems are improved and more robust patient records are implemented. In the end, this relates to the broader issue of the absence of strong integrated health care networks in Brazil. Existing efforts in this direction are still incipient and scattered, with no rigorous process of evaluation; they need to be amplified, strengthened, and coordinated. The MOH recognizes this as a challenge and has accelerated its efforts in this direction, as reflected in the SUS Healthcare Network Policy launched in late 2010.
- *Quality of care:* While the quality of services provided at the primary level has clearly improved, important weaknesses and gaps remain, especially at the secondary-care level, and in the integration across levels of care. In the absence of a vigorous push toward better quality, this is becoming the main source of inequalities in health, since different groups cannot access standard-quality services. Regarding quality in primary care, the MOH launched an important effort in 2011, the National Program for Improvement in Primary Care Access and Quality. Interested municipalities joined the program by signing a contract among the family health team, municipal health administrators, and the MOH, defining explicit commitments and quality improvement targets. Based on these contracts, action plans aimed at improving management and patient care were developed, which include components on self-assessment, monitoring, continuing education, and institutional support. After 18 months, an external evaluation will be conducted to assess whether access and quality have improved. In a final phase, a new agreement for quality improvement is negotiated. The program includes an incentive payment that varies depending not only on the team's performance over time but on how it fares relative to its peers. The base incentive, which is added to the variable PAB, is approximately US\$4,250 per month per family health team and US\$1,250 per month per oral health team.
- *Benefits package:* The SUS provides a full range of free services and does not exclude any service from coverage. Such an open-ended approach and the absence of clear criteria for offering and specifying services has made it possible for patients and families to demand in court services that are not yet on the SUS list of services and may not even have been proven effective. These legal demands are posing an increasing financial burden on the system. This is also true for the PCS: there is no explicit approach to define which services are offered under primary care and which are not. While changes to the program over time, for example, the inclusion of chronic diseases such as hypertension and diabetes, do appear to be rational and justified from a primary care perspective, the

definition of transparent and stable criteria for inclusion and exclusion would strengthen the program. For instance, the existing drug supply efforts appear insufficient to seriously dent the financial burden associated with out-of-pocket payments for drug purchases, especially among poor households. Current funding for the Basic Pharmacy and Popular Pharmacy programs represent a small part of out-of-pocket spending on drugs, though this spending may be unnecessarily high due to the prescription of off-list drugs, irrational use of over-the-counter drugs, and so forth. Further research on out-of-pocket payments for drugs would be needed to understand its composition and, hopefully, shed light on an expenditure that absorbs a nontrivial share of total health spending.

- The relative role of the public and private systems is a growing concern as the two systems become more and more intertwined, especially in large cities where private health insurance covers 25 to 50 percent of the population. Brazilians seem to use either, depending on the particular health care need they experience. The SUS has established a system by which private insurers must reimburse the SUS for the cost of care provided at SUS facilities, but the system has been systematically challenged in court based on the constitutional right of all citizens to use SUS services. In recent years, the National Agency of Supplementary Health (Agência Nacional de Saúde Suplementar), which was not created until 2000, has ramped up its efforts to incorporate private insurance in the MOH's initiatives to improve transparency and accountability to the public by publishing data on customer complaints and waiting times to schedule appointments for consultations and surgeries—even decertifying plans that exceed maximum time limits. As noted above, in a limited way, the MOH resource allocation formula for primary care has been changed to include private insurance coverage as a variable, a small but significant step. Tertiary care, however, is the elephant in the room. Even those with private health insurance revert back to the public sector for these services, which absorbs a large share of public resources and are concentrated in urban centers, where the relatively well-off live and can gain preferential access, challenging the SUS's ability to implement its principle of equitable access.

Annex 1 Spider Web

I. Outcomes comparisons: Brazil and Upper Middle Income Countries



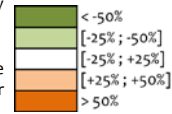
Note on interpretation:

In this plot 'higher' is 'worse' – since these indicators are positive measures of mortality / morbidity. Life expectancy is converted to be an inverse measure.

The values on the radar plot have been standardized with respect to the average upper middle income country value.

The table below summarizes outcome comparisons with the average upper middle income country (UMIC).

Country Data	Brazil	UMIC	% Diff.
GNI pc (2000 USD)	3593.3	1899.0	89.2%
IMR	17.3	16.5	4.8%
U5MR	19.4	19.6	-1.2%
Stunting	7.1	14.8	-51.9%
MMR	56.0	53.2	5.2%
Adult Mortality	218.1	160.6	35.8%
100-Life Expectancy	26.9	27.2	-1.0%
Neonatal Mortality	12.0	11.4	5.3%
CD mortality	26.0	22.0	18.2%



IMR: Infant mortality rate (2010). U5MR: Under-5 mortality rate (2010). Stunting: prevalence of low height-for-age among children under 5 (2010). MMR: Maternal mortality rate (2010) per 100 000 live births. Adult mortality: Adult mortality rate per 1000 male adults (2010). [100-(life expectancy)]: Life expectancy at birth (2010) subtracted from maximum of 100. Neonatal mortality: Neonatal mortality per 1000 living births. CD as cause of death: Communicable diseases as cause of death (% total). All data from World Bank's World Development Indicators. Income averages for stunting calculated by Bank staff and are unweighted.

II. Inputs comparisons Brazil and Upper Middle Income Countries



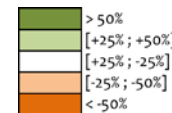
Note on interpretation:

This plot shows indicators which measure spending on health or the number of health workers per population.

The values on the radar plot have been standardized with respect to the average upper middle income country value.

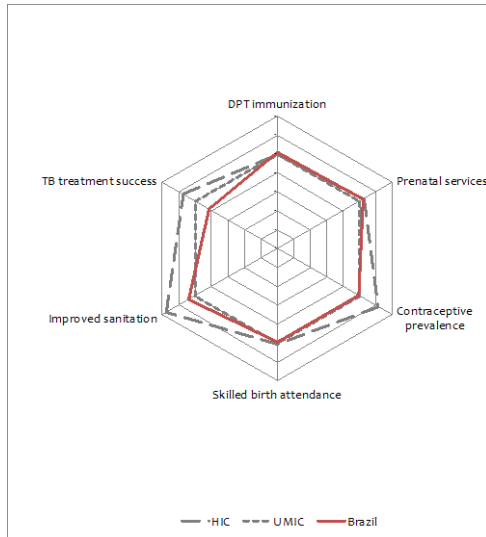
The table below summarizes inputs comparisons with the average upper middle income country (UMIC).

Country Data	Brazil	UMIC	% Diff.
GNI pc (2000 USD)	3593.3	1899.0	89.2%
THE %GDP	9.0	6.1	47.4%
Hosp. bed density	2.4	3.7	-34.5%
Phys. density	1.8	1.7	4.4%
Nur./midwife dens.	6.4	2.6	146.2%
GHE %THE	58.6	54.3	7.9%



THE as % of GDP: Health expenditure, total (% of GDP) (2010). Hospital bed density: Hospital beds per 1,000 people (latest available year). Physician density: Physicians per 1,000 people (latest available year). Nurse/midwife density: Nurses and midwives per 1,000 people (latest available year). GHE as % of THE/10: Public health expenditure (% of total expenditure on health) (2010). All data from World Bank's World Development Indicators.

III. Coverage comparisons Brazil and Upper Middle Income Countries

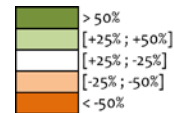


Note on interpretation:

In this plot 'higher' is 'better' – since these indicators are positive measures. In this case, all are percent of the population receiving or having access to a certain health related service.

The values on the radar plot have been standardized with respect to the average upper income country value.

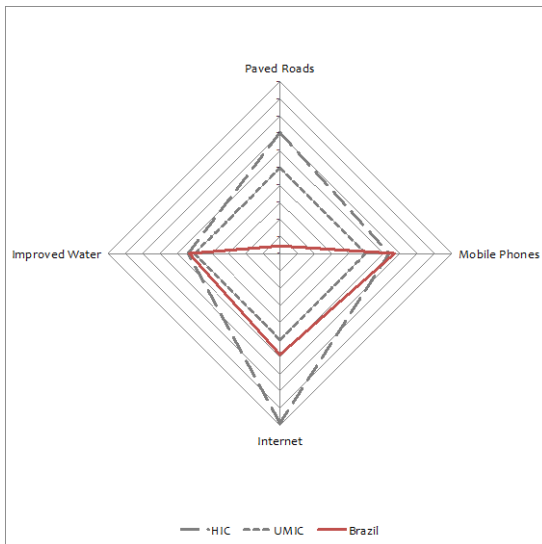
The table below summarizes coverage comparisons with the average upper middle income country (UMIC).



Country Data	Brazil	UMIC	% Diff.
GNI pc (2000 USD)	3593.3	1899.0	89.2%
DPT	98.0	95.8	2.3%
Prenatal	98.2	93.8	4.7%
Contraceptive	80.3	80.5	-0.3%
Skilled birth	97.0	98.0	-1.0%
Sanitation	79.0	73.0	8.2%
TB success	72.0	86.0	-16.3%

DPT immunization: % of children aged 12-23 months with DPT immunization (2010). Prenatal services: % of pregnant women receiving prenatal care (latest available year). Contraceptive prevalence: % of women ages 15-49 using contraception (latest available year). Skilled birth attendance: % of all births attended by skilled health staff (latest available year). Improved sanitation: % of population with access to improved sanitation facilities (2010). TB treatment success: Tuberculosis treatment success rate (% of registered cases). All data from World Bank's World Development Indicators.

IV. Infrastructure comparisons Brazil and Upper Middle Income Countries

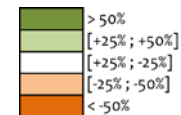


Note on interpretation:

In this plot 'higher' is 'better' – since these indicators are positive measures of provision of certain good / service, and a measure of urban development.

The values on the radar plot have been standardized with respect to the average upper middle income country value.

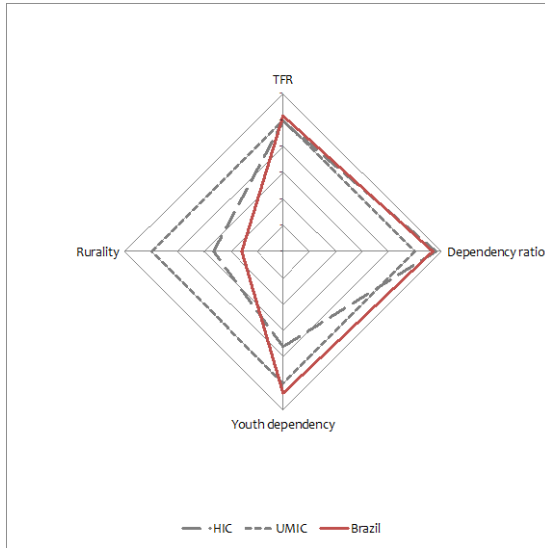
The table below summarizes infrastructure comparisons with the average upper middle income country (UMIC).



Country Data	Brazil	UMIC	% Diff.
GNI pc (2000 USD)	3593.3	1899.0	89.2%
Paved roads	5.5	57.6	-90.4%
Mobile phones	123.2	92.3	33.4%
Internet	45.0	38.3	17.4%
Water	98.0	92.6	5.8%

Paved roads: % of total roads paved (most recent). Internet users: users per 100 people (2010, with some estimates from prior years). Mobile phone users: mobile cellular subscriptions per 100 people (2010). Access to improved water: % of population with access to improved water source (2010). All data from World Bank's World Development Indicators.

V. Demography comparisons Brazil and Upper Middle Income Countries

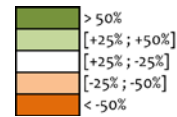


Note on interpretation:

Indicators here measure births per woman, the extent of rurality, and the number of dependents.

The values on the radar plot have been standardized with respect to the average upper middle income country value.

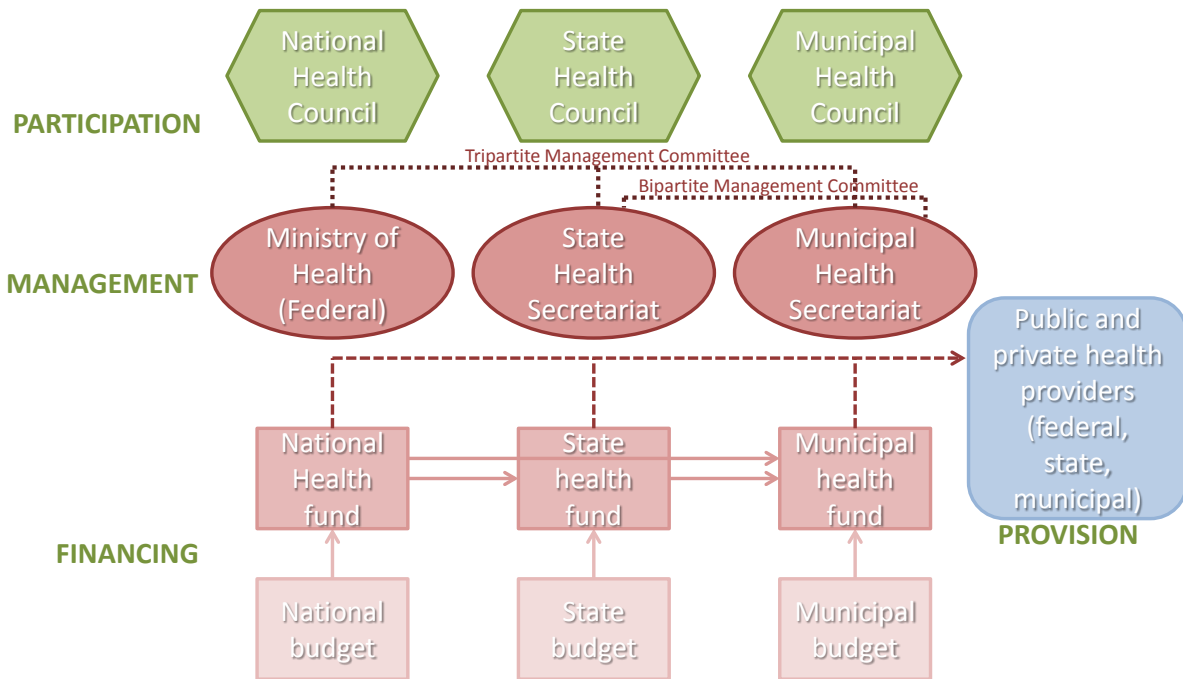
The table below summarizes demographic indicators comparisons with the average upper middle income country (UMIC).



Country Data	Brazil	UMIC	% Diff.
GNI pc (2000 USD)	3593.3	1899.0	89.2%
TFR	1.8	1.8	3.4%
Dependency (Total)	48.1	42.2	13.8%
Youth share	78.4	73.0	7.4%
Rural pop.	13.5	42.6	-68.3%

TFR: total fertility rate (births per woman), 2009. Dependency ratio: % of working-age population (2010) aged less than 15 or more than 64. Youth dependency: % of working-age population (2010) aged less than 15. Rurality: % of total population in rural areas (2010). All data from World Bank's World Development Indicators.

Annex 2 The Decentralized National Health System in Brazil



Source: Adapted from Mori Sarti et al. 2012.

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The World Bank supports the efforts of countries to share prosperity by transitioning toward universal health coverage (UHC) with the objectives of improving health outcomes, reducing the financial risks associated with ill health, and increasing equity. The Bank recognizes that there are many paths toward UHC and does not endorse a particular path or set of organizational or financial arrangements to reach it. Regardless of the path chosen, the quality of the instruments and institutions countries establish to implement UHC are essential to its success. Countries will face a variety of challenges during the implementation phase as they strive to expand health coverage. With that in mind, the World Bank launched the Universal Health Coverage Studies Series (UNICO Studies Series) to develop knowledge and operational tools designed to help countries tackle these implementation challenges in ways that are fiscally sustainable and that enhance equity and efficiency. The UNICO Studies Series consists of technical papers and country case studies that analyze different issues related to the challenges of UHC policy implementation.

The case studies in the series are based on the use of a standardized protocol to analyze the nuts and bolts of 27 programs in 25 countries that have expanded coverage from the bottom up, starting with the poor and vulnerable. The protocol consists of 300 questions designed to elicit a detailed understanding of how countries are implementing five sets of policies to accomplish the following:

- Manage the benefits package
- Manage processes to include the poor and vulnerable
- Nudge efficiency reforms to the provision of care
- Address new challenges in primary care
- Tweak financing mechanisms to align the incentives of different stakeholders in the health sector

The UNICO Studies Series aims to provide UHC implementers with an expanded toolbox. The protocol, case studies and technical papers are being published as part of the Series. A comparative analysis of the case studies will be available in 2013.



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