

Health Care in Brazil: Addressing Complexity

WORLD BANK HEALTH PROGRAMS IN BRAZIL HAVE been relevant, but results have been uneven, according to a recent study by the Operations Evaluation Department (OED). Bank-supported programs have helped to control the spread of serious tropical diseases, improved access to health services in poor areas, and contributed to the construction of a system for epidemiological surveillance. But while projects in disease control and basic health services have targeted important and relevant concerns, critical challenges remain to be addressed, including persistent inequities and inefficiencies in the financing of health services. In order to be a more effective partner in tackling the considerable challenges of the Brazilian health sector, the Bank should work to establish the kind of strong and consistent presence that is required to build—gradually, but persistently—a broad-based coalition for reform.

The Strategy

The Bank has financed 10 projects in Brazil's health, nutrition, and population sector; carried out major field research; and served as a policy interlocutor for the government. Its health strategy has focused on three main concerns: providing resources to expand the accessibility of basic medical services in poor or marginal areas; offering policy advice and studies on methods to improve the efficiency and efficacy of the health care sys-

tem; and financing projects to control endemic diseases such as malaria, schistosomiasis, and AIDS. The strategy appears appropriate in the Brazilian context—that of a middle-income country with a relatively high degree of poverty, a health care system known for inefficiency and inequity, and a population that is exposed to a variety of endemic diseases.

The Bank's strategy has evolved over time—expanding access to basic services was a primary emphasis in the 1980s and



early 1990s, but by the mid-1990s Bank lending and policy dialogue increasingly focused on improving system efficiency and efficacy. Because Bank lending represents less than 1 percent of annual health expenditures in Brazil, the Bank's effectiveness depends on its use of lending and policy advice to leverage wider changes in Brazil's health system.

Several shortcomings are evident in Bank strategy, however. First, many of the health posts constructed to improve health care access for the poor are underutilized, short of qualified staff, and lack the facilities needed to serve their increasingly demanding and urban population of consumers. Second, it is not clear whether the Bank's research and efforts to transform the health care delivery system in Brazil sufficiently took into account the system's complex politics, institutions, and political economy. This may have made the Bank's ambitions broader, and effectiveness more transitory, than they would have been with a clearer picture of the country context in view. And third, the Bank's focus on endemic diseases neglected other, noncurative, health needs of the aging and increasingly urbanized population.

Basic Health Care

Child Health and Nutrition

Brazilian children have become much healthier in the past two decades. Infant mortality rates and childhood height-for-age charts, two good indicators of the general health of children, show significant improvements in recent years. The changes have been brought about by a complex interaction of improvements in purchasing power; maternal education; access to health care, including oral rehydration therapy; community infrastructure and water supply; and individual behavior, such as increased breastfeeding and fewer short-interval births.

But despite the recent improvements, serious regional inequalities persist: children in the Northeast, the poorest, most rural, and most traditional region of the country, are much less healthy, and their health is improving more slowly, than children in other areas. While more than 10 percent of children nationwide still suffer severe growth retardation, or "stunting," in the Northeast the figure rises to almost 18 percent, and in the rural Northeast, one in four children is affected.

Despite significant attention from the Brazilian government and international donors, including the Bank, the Northeast has not kept pace with health improvements in the other regions. This cannot be explained by differences in income; it is the legacy of greater improvements in access to health care for children and mothers, maternal education, and reproductive practices in the more urban areas.

Fertility and Women's Reproductive Health

Brazil's fertility decline has been dramatic. The number of births per woman fell from 5.8 in 1970 to 2.3 in 1996, despite the near absence of a government population policy. The speed of the decline in fertility has been more rapid than in India; Bangladesh; Mexico; and, by some measures, Indonesia, a country with an active population policy. Recent declines in total fertility have been particularly remarkable in the Northeast.

Although government interest in family planning and reproductive health has increased considerably in recent years, previous indifference limited the Bank's role.

Lower fertility rates have contributed to the recent improvements in childhood health by reducing the risks associated with short birth intervals and high parity, and have reduced demand for immunization, prenatal care, and birth attendance, ultimately lessening the pressure on the health system and making care more accessible.

Although it is unclear why Brazilian women began to have fewer children, it appears to be a demand-side story. Social scientists identify the high rate of abortion and contraceptive use as the most important determinants of lower fertility. The two most popular methods of limiting fertility are female sterilization and the pill. The health consequences of these practices have been complex and damaging: legal restrictions, financial incentives, cultural norms, and misinformation frequently lead women to use delivery as an occasion for sterilization, which is one reason that the cesarean delivery rates in Brazil are the highest in the world, and maternal mortality is unusually prevalent.

Northeast Basic Health Services Projects

The World Bank financed two Northeast Basic Health Services projects beginning in the mid-1980s, as part of the Brazilian government's 15-year development plan for the Northeast region. The projects built health care facilities, encouraged management improvements at the federal and state levels, and provided technical skills training for the development of new *basic health care modules* and programs of comprehensive care for women and children.

Partly as a result of a difficult political and macroeconomic context, these projects evolved into facilities construction and medical equipment programs. They succeeded in expanding access to basic health services but did not transform the mode of basic health care delivery within that system. Child health improved during the life of the projects, and access to health care played a significant role in that improvement. But because the projects did not include an adequate monitoring and evaluation system, it is difficult to assess their impact on these trends.

The evidence suggests that the projects' contribution may have been limited—they disbursed slowly until 1994, and by this time most of the improvement in child health had already occurred. Many of the clinics remain underutilized, and focus group sessions suggest that consumers are dissatisfied with service quality, and increasingly prefer to visit doctors rather than nurses at clinics. The projects were negatively affected by the poor labor market for health care providers, and hampered by the Bank's inadequate understanding of the political forces in the sector and their institutional context.

Infectious and Parasitic Diseases

The use of oral rehydration therapy has brought about a recent sharp decline in diarrhea among children. Diseases preventable through vaccination are largely under control, although sustaining highly successful vaccination programs will be a challenge, given the inefficiencies in the purchase and distribution of pharmaceuticals. Tuberculosis is on the rise as a result of the AIDS epidemic, increasing worldwide immigration, and relative neglect by the international public health community during the 1970s and 1980s. Leprosy incidence, while falling in most countries, is on the rise in Brazil.

Endemic parasitic diseases continue to threaten rural and remote areas, and malaria is almost exclusively an illness of the Amazon region. In the Northeast, urbanization and the government's endemic disease program are lowering the threats of leishmaniasis, schistosomiasis, and Chagas' disease. Yellow fever, which disappeared from Brazil in mid-century, has again become a threat to parts of the country. Dengue and cholera, thought to be under control, have resurfaced in recent years. The AIDS epidemic, originally the most intense among bisexual and homosexual men, is increasingly affecting women, heterosexuals, and intravenous drug users.

Disease Control Projects

Bank-financed disease control projects have focused on diseases—malaria, leishmaniasis, schistosomiasis, Chagas' disease, and AIDS—that are significant prob-

lems in Brazil, strike young people, and disproportionately afflict poor and marginalized groups. At least two of the four World Bank disease-control projects have contributed to declines in the incidence of those diseases and mitigated their effects on afflicted individuals. The Endemic Disease project and the Second Malaria Control project helped to slow the spread of disease and promoted treatment programs. Although not all the reductions in incidence can be attributed to the projects, they certainly contributed. The First Malaria Control project did not reduce the incidence of malaria in Rondonia, however, and was rated unsatisfactory.

Although the First Malaria Control project underestimated the importance of institutional strengthening and behavior change in public health, subsequent disease control projects have helped build Brazil's human, physical, and information systems for disease surveillance. The Brazilian government, with significant Bank support, has expanded its ability to combat infectious and parasitic diseases in a modern, more comprehensive manner. Instead of relying on vector eradication, which may not be possible, the government has shifted its emphasis to encompass overall disease control, stressing the importance of behavioral changes by individuals through information campaigns, community mobilization, leadership by authorities, and the treatment of those infected.

With support from the Bank, the government has launched a National AIDS Prevention and Treatment program that is increasing capacities for surveillance, treatment, institution building, and prevention by working with NGOs. The program has been well-designed and effectively implemented. It is too early to tell, however, whether the project has slowed the rate of increase in disease incidence.

Chronic and Degenerative Diseases

New demographic patterns emerge as a country modernizes and develops—leading to what is known as the *epidemiological transition*. Infant mortality and fertility decline, life expectancy rises, and infectious and parasitic diseases are no longer the leading causes of death. These new demographic patterns

Table 1: The Leading Causes of Death: Proportionate Mortality in Brazil (percent of all deaths), 1994

	South	Southeast	Center-West	North	Northeast	Overall
Circulatory diseases	32.6	30.6	27.1	17.9	19.5	27.6
External causes	11.8	9.8	17.6	13.9	9.7	12.1
Neoplasms	15.2	11.9	9.9	7.8	6.3	9.3
Respiratory diseases	10.7	10.6	7.7	6.4	5.9	9.2
Glandular, metabolic, and immune interruptions	4.0	6.5	4.1	3.4	3.9	5.2
Infections and parasites	3.2	4.1	6.4	7.0	6.4	4.8
Unknown causes	9.5	12.5	12.8	28.3	37.0	17.0

emerged in Brazil's South and Southeast regions decades ago, and by 1980 all regions were undergoing the transition. By 1980, cardiovascular disease had become the leading cause of death in all major regions, and almost all states (table 1). The prevention and treatment of conditions more common among the aging—including screening for cancer, treatment of strokes, and care for long-term and chronic conditions that require expensive treatments—will require reform of the health care system in the coming years. To make the necessary investments in medical infrastructure, equipment, and training, it will be necessary to ration free and universal health care, rely more heavily on private financing, or do both.

In 1989, the World Bank sponsored high-quality analytic work that identified priorities for improving adult health, including maternal health and promotion of healthy behaviors, such as exercise, diet, smoking cessation, and injury prevention. The Bank, however, was unable to develop public health projects with the Government of Brazil to address these concerns.

The Health Care System in Brazil

The constitution of 1988, following a decades-long social movement to combat the inequitable health care policies of the departed military regime, mandated a

free, universal health care system, Unica da Saúde (SUS). SUS contracts out a large majority of inpatient care and a substantial portion of outpatient services to a network of private and philanthropic hospitals, clinics, and other facilities. The government manages and owns just 31 percent of the hospital beds it supports and has slowly been decentralizing control of publicly owned facilities to states and municipalities. Privately financed health care has grown rapidly: 25–26 percent of Brazilians are covered by private plans. These plans vary widely in quality and price, but generally exclude coverage of expensive, catastrophic conditions, leaving that job to the public system, and are subject to almost no regulatory oversight.

Although Brazil's health system might appear to be efficient—it substantially “separates financing from the provision of services”—it is instead inching toward crisis. The public system is severely underfinanced, resulting in regional inequalities, rationing of services, and a perceived decline in quality. The hyperinflation of the late 1980s and early 1990s and the irregular flow of resources to health have contributed to the evolution of a fee structure for medical treatment that has not kept pace with costs, and payment can be sporadic. Doctors

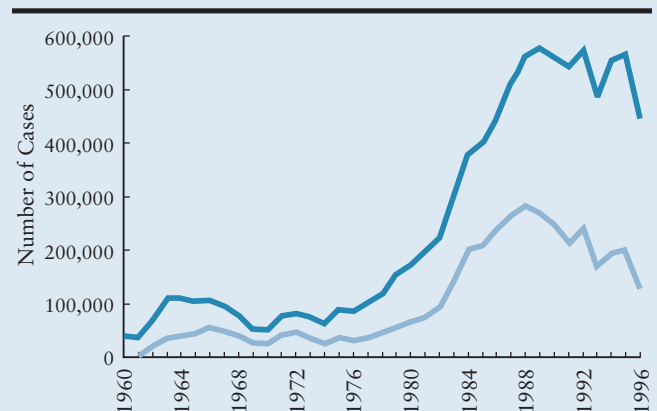
Malaria: A Case of Bank Involvement

The Brazil Amazon Basin Malaria Control project was initiated in response to a dramatic upsurge of malaria in the Amazon Region. The program had two goals: first, to reduce the prevalence of malaria to a level that no longer represented a public health problem and to reduce the risk of reintroduction in areas of low prevalence, and, second, to enhance the organizational efficiency and responsiveness of SUCAM, Brazil's leading federal public health agency at that time.

During the program period, the incidence of both strains of malaria—*P. vivax* and *P. falciparum*—among indigenous peoples in the region fell significantly. The decline coincided with a shift in project strategy from malaria eradication to malaria control and management, with a particular focus on reducing the incidence of *falciparum* cases and treating those infected with the strain, which was responsible for malaria deaths. Malaria rates had begun to fall before the shift in strategy, however, which clearly signals that additional factors—perhaps including the earlier introduction of mefloquine—were at work. Other events also are probable contributors to the falling rates, including migration; land-settlement patterns; and a slowdown in the arrival of goldminers, loggers, and other fortune-seekers, fertile targets for the parasite, in the Amazon area.

The effort to deal with malaria is emblematic of the Bank's work on specific diseases in Brazil. The early malaria work focused exclusively on eradicating malaria-carrying mosquitoes, without much effect. The second phase addressed the motives and incentives of patients, health care providers, and other key actors; promoted behavioral change; and targeted rapid diagnosis and treatment, with good results.

Figure 1: The Epidemiology of Malaria in Brazil, 1960–96



frequently must work at several sites to make ends meet. Stories of long lines for hospital services, mistakes in emergency care, strikes and walkouts by medical professionals, arbitrary triage, and other crises are reported daily in the press.

The structure of the health system in Brazil provides weak incentives for quality and cost-effectiveness. The government is only now beginning to develop information, monitoring, and evaluation systems for the health care system; it will be some time before that data can be tied to incentives and other quality assurance mechanisms.

Local governments have been given wide responsibilities under decentralization to manage all aspects of health care, but they do not necessarily have the capacities and incentives to deliver coordinated and cost-effective services. In addition, the old military regime left a legacy of an exclusionary and highly centralized health system that has little capacity and is unresponsive to local needs and Brazil's enormous regional diversity. The system is distorted and expensive, expenditures do not target the poor, the health lobby is strong and well-organized, institutions are fragmented, medical training encourages specialization and high-technology care, and Brazil has one of the lowest ratios of nurses to doctors in the developing world.

Promoting Health Sector Reform

In the mid-1980s, the Bank sought to support health decentralization through the São Paulo Basic Health project. The project design did not adequately account for complexities in state politics and federal-state relationships, however, which limited its impact.

The current health sector reform project, Reforsus—cofinanced by the World Bank and the Inter-American Development Bank—is predicated on a much more sophisticated understanding of economic incentives than earlier projects. It has established an innovative instrument to disburse grants to health facilities on the basis of competitive bids. Reforsus also aims to improve the efficiency of the health care system by changing government payment systems, so that doctors and hospitals will be paid more when they provide particularly cost-effective services. Unfortunately, this strategy may not work. Partly as a result of interest group pressure, rates continue to be set in a nontransparent process, and a variety of other rules also influence the payments providers

receive. As a result, the behavior of doctors may not change significantly.

Given the complexity of the Brazilian health system and the interests at stake, reforms will require commitment, persistence, and the nurturing of relationships with strategically important partners over at least a 10-to-15-year period. Changing the education of health care providers alone will take more than a generation. To date, the Bank has no long-term strategy for—and has little experience in—coalition-building. And the Bank's sector studies, although of high quality, are not widely disseminated. A visible, permanent, and informed presence in Brazilian policy debates should be the first step in becoming involved in the reform of the health system.

Recommendations

- *Coalition building.* The Bank must grapple with the difficult, institutionally embedded problems of the Brazilian health sector. Problems require long-term solutions in areas such as medical education, the labor market for health care providers, and the political economy of budgeting. The Bank must adopt at least a 10-year timeframe for reform, first achieving a highly visible, permanent, and informed presence in Brazilian policy debates.
- *Regulation of private health care.* The private sector might provide health care more efficiently and effectively to poorer and middle-income segments of the population with the implementation of appropriate regulation and targeted subsidies.
- *Providing basic health care services.* New approaches are needed in the financing of programs that address the needs and health conditions of poor and marginalized citizens. The Bank should encourage and pilot such innovative projects.
- *Chronic and degenerative diseases.* The prevention and treatment of conditions associated with the epidemiological transition will require the health system to expand, improve, and develop new delivery systems. The Bank could be useful in experimenting with ways to reduce the incidence of lifestyle-related risk factors among poor and marginal groups.
- *Measures of health system performance.* If health providers and systems are to be held accountable for the quality of services they offer, monitorable indicators of health system performance must be implemented.

► This *Précis* is based on *Brazil: The Brazil Health System*, by **Varun Gauri**, Report No. 18142, June 30, 1998. Available to Bank Executive Directors and staff from the Internal Documents Unit and from regional information service centers, and to the public from the World Bank InfoShop.

