



## CHAPTER 1

# Colombia: After a Decade of Health System Reform

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### **Background and Context**

Colombia is a middle-income country with an estimated 2005 population of 43 million (Departamento Administrativo Nacional de Estadística/National Administrative Statistics Department, 2007). Over the past three decades, the Colombian population has experienced the demographic and epidemiological changes that characterize societies in transition: a rapid decline in the total fertility rate (from 3.24 children per woman in 1985 to 2.48 in 2005), a significant increase in life expectancy (from 71.5 to 76.3 years for women and from 64.7 to 69 years for men, over the 1985 to 2005 period), and rapid urbanization (74.3 percent of the population lived in urban centers in 2005, compared with 67 percent in 1985).

Half the population is identified as poor and inequality is widespread. Colombia, like other developing nations, is highly vulnerable to external and internal shocks that affect the income of the poor and their capacity to purchase needed health care services. Prior to 1993, only a quarter of Colombians had health insurance and more than half of total spending on health was out of pocket. Economic barriers were frequently cited as obstacles to care-seeking by the poor: nearly 60 percent of those who reported an illness requiring a visit to a health

facility in 1993 did not use these services because of costs associated with care-seeking.

Colombia introduced mandatory social health insurance with the approval of an ambitious health care reform package in 1993. Occurring in the midst of decentralization and other state modernization reforms, the health reform was intended to increase burden-sharing of health risks and financing to improve access to care and provide financial protection to those beyond the formally employed. The reform introduced competition into both insurance and the provision of care through a managed-care model.

As of 2008, more than 85 percent of the population is insured and access to and use of health care has increased significantly for the poor. Financial protection has also improved dramatically, as has spending on public health.

Yet despite its novelty and promising results, the Colombian reform remains little studied or discussed internationally. Much of the extensive and high-quality literature produced in the country is not easily available to the rest of the world; perhaps this is one of the reasons little is known of the impact and challenges of Colombia's introduction and implementation of health care reform.

The experience offers an opportunity to understand the challenges, benefits, and pitfalls of introducing health system features like active purchasing, risk adjustment, insurance, and benefits packages—more common to wealthy countries—into a more resource- and capacity-constrained environment. This book aims to make recent research results public and to trigger an evidence-based discussion of this comprehensive reform, both nationally and internationally.

### ***The Health Care System before 1993***

Prior to the changes introduced by the health care and financial decentralization reforms in 1993, access to and use of health care was low. The poor were vulnerable to impoverishing spending as a consequence of illness (Giedion, López, and Riveros, 2005). The health care system in Colombia was characterized by atomized risk pools, low efficiency, failure of public subsidies to reach the poor, large out-of-pocket expenditures, and significant inequality.

These factors disproportionately affected the poor: more than half of the bottom income quintile was unable to obtain care when they needed it because they could not afford it. One-quarter of the total population had no access to effective health care because of inadequacies in health care infrastructure, human resources, medicine, and medical goods (Barón, 2007). Although public facilities were intended to be free and were meant to cover the poor and uninsured, only 20 percent of individuals admitted to public hospitals were from the poorest income quintile and 91 percent of the poorest hospitalized patients incurred out-of-pocket expenses. Public subsidies benefited patients who were better off: almost 60 percent of admittances to public hospitals were of middle- or high-income individuals from the fourth and fifth income quintiles, but only 69 percent of the wealthiest hospitalized patients paid out-of-pocket expenses (Molina *et al.* 1993).

The pre-reform National Health System comprised three independent sub-sectors: the official or public sector (government-owned facilities), the social security sector for formally employed people, and the private sector, used by both the insured and the uninsured. More than 40 percent of all health interventions and hospitalizations were provided through the private sector (Departamento Administrativo Nacional de Estadística, 1992). The system relied on general tax revenue, payroll contributions, and out-of-pocket expenditures, with no pooling of the three sources of financing. Not only was government spending before the reform low, but there was also no effective targeting mechanism for public subsidies. Colombia spent 1.4 percent of its gross domestic product (GDP) on health care (Molina *et al.*, 1993) in 1993, though Mexico, Chile, Venezuela, Brazil, and Argentina were already spending a larger percentage of their GDP on health five years earlier.

Public health financing was funneled to finance public hospitals, primary care facilities, public health programs, disease surveillance activities, and the administrative expenses of the central and decentralized Ministry of Health offices based on their historical budgets, without relationship to the level of services provided, the population's health needs, or health outcomes. Beyond the centralized public health programs, there was no separate allocation of resources for disease prevention, health promotion, or community health activities. The public hospital network was composed of institutions of varied levels

of quality and efficiency but all with expensive labor costs stemming from a highly unionized workforce. The concurrent implementation of decentralization gave ownership of public facilities to local governments, which received National Treasury transfers to finance their historical budgets. There were few incentives for public hospitals to become more efficient, improve the quality of care, or adjust their portfolios of services according to population needs. In fact, many public hospitals were often in financial crisis by mid-year and relied on government bailouts to survive.

People who were formally employed contributed with payroll taxes to social security institutions that provided health coverage to the enrolled population through their vertically integrated networks of facilities and health care providers. Social security beneficiaries represented around one-quarter of the Colombian population. Per capita health spending in the social security sector was several times higher than that for the rest of the population relying on the services of the Ministry of Health. In addition, a large private sector provided insurance products and health care to the population; insurance did not generally cover dependents.

### ***The Reforms of 1993***

Law 100 of 1993 set up the legal framework of the new Colombian health care system and adopted the “structured pluralism” model (Londoño and Frenk, 1997). The reform unified the social security, public, and private sub-systems under the General System of Social Security in Health (known by its Spanish acronym, SGSSS). The reform also reorganized the system around functions and responsibilities rather than population groups.

The 1993 health reform created mandatory universal health insurance to improve the equity and performance of public spending on health. Financed through a combination of payroll contributions and general taxation, this comprehensive national social insurance scheme included a contributory regime for those able to pay and a fully subsidized scheme for the poor. Beneficiaries enroll with public or private insurers (health funds), have legal rights to an explicit package of health benefits, and receive care from a mix of public and private

providers. The reform introduced a national equalization fund, the Fondo de Solidaridad y Garantía (FOSYGA; Solidarity and Guarantee Fund), to provide cross-subsidies between wealthy and poor, sick and healthy, old and young, and financing to stabilize health financing during economic crises.

Both formally employed and independent workers earning more than a pre-determined minimum income must enroll in the contributory health insurance regime and contribute 12.5 percent of their income (12 percent, before January 2008). Funds are collected by the enrollee's insurer of choice and then go to the national equalization fund. Poor and indigent people, who are identified as such through the Sistema de Identificación de Beneficiarios (SISBEN; Beneficiary Identification System), a proxy means test, do not make any insurance contributions and are covered under the subsidized health insurance regime.

Insured individuals in both the contributory and subsidized regimes choose their insurer, choose care providers within the insurer's network, and receive a health benefits package purchased by insurers from public and private providers through contracts. All participants in the contributory regime can enroll their dependents as a family unit. The benefits plan for the contributory regime is generous and covers all levels of care. The package had a premium equivalent to US\$207 annually in 2007. Primary care, some inpatient care, and emergency care are now covered under the subsidized regime and have a premium equivalent to US\$117. This coverage is complemented by inpatient care at level 3 public hospitals. According to the law, the supply-side subsidies should gradually transform into demand-side subsidies as insurance coverage expands, eventually leading to universal coverage with a uniform package for everyone. Residents still uninsured are able to use public facilities to receive preventive and public health services and emergency care.

Regardless of insurance status, all citizens are eligible to receive the benefits of the public health intervention package, the Plan Básico de Salud (PBS or Basic Services Plan; called the Plan de Atención Básica until 2008). Municipalities provide health promotion and disease prevention services included in the PBS. Financing for public health is separate from other health care funding.

The reforms mandated that public hospitals would make the transition from being state care providers financed through supply-side subsidies based on their historical budgets, to being state enterprises with autonomous governance structures remunerated for the services provided. Private health care providers were to compete with public providers for the provision of the mandatory benefit plan on the basis of quality and were to negotiate contracts with insurers. The challenges were many and the pressure for modernization in the public hospital network was great with the changes introduced to the provision of care.

## **A Decade of Change**

### *The Political Economy*

The government administration changed with the presidential elections in mid-1994, seven months after Law 100 was approved. Although from the same political party as the previous government, the new team was not completely aligned with the principles of the reform. Approval of key by-laws and regulations required for implementation of the law were delayed and the reform process lost momentum. Despite these difficulties, however, the contributory regime attracted new insurers that entered the system to extend insurance coverage. Regulations for insurers for the subsidized regime were formally introduced at the end of 1995 to launch the implementation of that scheme. Political difficulties and necessary negotiations with local governments followed; the subsidized regime was not launched until almost two years later.

Between 1991 and 1994, Colombia experienced important economic growth, followed by a dramatic reverse that led to a recession in 1998–99 (with record negative growth of –4.3 percent in GDP in 1999). A mild economic recovery followed in 2000–01, with GDP growing in those years by 2.8 and 2.4 percent, respectively. Official unemployment figures rose from 8.7 percent in 1995 to 20.2 percent in 2000, however (representing the highest unemployment rates in the past 20 years), and in 2000, informal employment represented 54.9 percent of total employment. The recession occurred in the context of an intensification of the internal armed conflict, which displaced about 580,000 people between 1998 and 2001. The rural population was the most

severely affected: 82 percent of displaced individuals came to cities from rural areas.

The health care reforms had been only partially implemented by 2001 and the SGSSS was undergoing a severe and generalized financial crisis. Universal insurance coverage was still far from being achieved in 2001, with only 58 percent of the population insured, and the transformation of hospital financing had affected only 50 percent of hospital revenue. Confusion about the decentralized roles of local authorities in public health, combined with shortages in the allocation of resources for vaccination programs, negatively affected immunization rates.

That situation forced the government to consider two alternatives. One was to return to the supply-side subsidies, with public-sector budgets controlled by the central government—and in particular the National Treasury—but at the expense of the subsidized regime and the health care system's reform (Gaviria, Medina, and Mejía, 2006). Alternatively, the government could correct the external conditions affecting the delivery of care and strengthen the health sector reform process. The government adopted the latter approach and the administration committed to accelerating the expansion of subsidized health insurance for the poor; developing a program to support the redesign, reorganization, and modernization of public hospitals and to ensure their financial sustainability; and strengthening the national immunization program.

The implementation of this vision began in 2002. The previous labor and health ministries were merged. The new Ministry of Social Protection became responsible for pensions, health insurance, public health programs, and all other social assistance programs. A quality assurance system was designed, with the introduction of a licensing and accreditation process for public and private health care facilities and providers. An aggressive hospital restructuring program was negotiated with local governments and the Ministry of Finance.

### ***Measuring Results***

To objectively measure the impact of social policy change in the developing world, it is necessary to analyze progress in light of the original pre-reform conditions, not only with respect to the degree of achieve-

ment of ambitious reform goals. Given that reforms are processes evolving over time and within societies in states of continuous change, it seems sensible to first understand the complexities of transformation in order to objectively assess any change, even when it seems small and incomplete by international standards.

Breaking apart the traditional social security schemes for the formally employed and transforming them into regular, competing insurers was a political and institutional task impossible to imagine before 1993. In fact, most—if not all—countries in Latin America with health care systems similar to that of pre-reform Colombia still have segmented health care systems with significant inequality in health financing, no explicit benefits packages, and no contracting of a mix of public and private providers. Establishing a functional equalization fund to transform income contributions into risk-adjusted capitated payments to insurers was a test for those financial agencies to be contracted through public bidding to manage the fund's finances. The complexity of the equalization fund—with four sub-funds (or accounts in FOSYGA) to support such functions as full or partial insurance premiums for more than 30 million people—requires well-developed capital and financial markets accompanied by state-of-the-art information systems.

Demonstrating and accepting that public subsidies did not reach the poor, and introducing a proxy means test to better target government subsidies to those most in need, was an immense challenge in the early 1990s; it still is in many parts of the developing world. The introduction and use of the SISBEN in the health sector was a victory for the Colombian poor and an important improvement for the allocation of public resources to health. The scheme was later adopted in other sectors as well.

Governance mechanisms like the Consejo Nacional de Seguridad Social (National Social Security Council)—with representatives from public and private insurers and care providers, the government, and civil society having the power to make decisions on the functioning of the health care system—are still unknown in many countries with income levels similar to Colombia's. After 1993, for the first time there is a formal regulatory structure, through which the Minister of Finance and the Minister of Health sit at the same table to debate the techni-



cal and financial aspects of the health care system when negotiating any decision affecting public finances. An open negotiating sphere in which all special interest groups are represented is commoner to more egalitarian societies with well-established democracy than to a low- to middle-income country with a 40-year history of internal armed conflict. The risk of capture was important and the technical requirements for it to function as envisioned were great. Ten years of implementation have taught important lessons both for Colombia and for other countries that face similar challenges.

The five papers brought together in this volume examine Colombia's health system reforms and their impact after more than a decade of implementation. The book presents discussion in areas such as financing, hospital reform, insurance impact, regulation, and public health. Each paper analyzes the reform from a different perspective, although all are naturally inter-related, given the structure of the system and the way it functions. The analysis discussed here refers to the period between 1993 and 2003; it was carried out with the information available before the most recently released National Health Survey of 2007–08 and the approval of Health Law 1122 in 2007.

### ***Examination of the Reform Experience***

Chapter 2, by Amanda L. Glassman, Diana M. Pinto, Leslie F. Stone, and Juan Gonzalo López, seeks to improve the quality of the policy debate on public health in Colombia by examining the evolution of public health institutions, spending, and programs—and the effectiveness of these—over the past 30 years. The chapter uses the vaccination, tuberculosis, and malaria prevention and control programs as case studies. The authors find that public health conditions have improved substantially in Colombia over the past decade. Equity in access to public health services has increased over time, but remains a problem for the very poor and for ethnic minorities and displaced people. Spending on public health has increased, and earmarked financing protects it in the aggregate. A severe recession in the late 1990s negatively affected the availability of non-earmarked financing for public health, however, which led to drops in health coverage during this period. Insurance has proven a useful tool to increase coverage rates for some interventions,

although available data and analyses provide a confusing picture of coverage and impact trends in tuberculosis and malaria.

Decentralization reforms have complicated the public health panorama, particularly from the perspective of vulnerable populations, leading to suboptimal implementation of programs and, perhaps, outcomes. The use of insurance and contracting to achieve public health goals is of interest worldwide, and the Colombia case shows that the devil is in the details of underlying governance, data, and evidence necessary to develop and implement effective policy.

Chapter 3, by Ursula Giedion, Beatriz Yadira Díaz, Eduardo Andrés Alfonso, and William D. Savedoff, examines the impact of health insurance by applying a series of different quasi-experimental design techniques, including regression discontinuity, propensity score matching, and matched double difference when comparing differences between insured and uninsured people. The chapter discusses the effect of subsidized insurance on equity, access to care, utilization of services, and financial protection of households.

Although insurance coverage increased across all income groups after 1993, the improvement has been particularly pronounced among the poorest individuals and in the least-developed regions. Empirical evidence indicates that before the reforms, the poorest segment of the population had almost no financial protection when facing illness, since only a small portion of costs were covered by health insurance. Meanwhile, 6 of every 10 of the wealthiest individuals were protected by insurance. A decade later, the gap between the rich and the poor has been reduced considerably. Insurance coverage in the lowest income group has increased to 18 times what it was in 1993, whereas coverage among the highest income group increased only 1.4 times. Analysis with four methodologies consistently indicates that the subsidized health insurance scheme has considerably improved access to and utilization of health services, especially among rural and poor Colombians. Insured people of all ages are much more likely than their uninsured peers to receive care when they need it. Analysis results show that insurance is quite important for rural and poor children because it increases the likelihood of prenatal care, of attendance by a qualified care provider at birth, of receiving care when ill, and of a completed immunization scheme.

Chapter 4, by Teresa M. Tono, Enriqueta Cueto, Antonio Giuffrida, Carlos H. Arango, and Alvaro López, presents evidence and discussion of the transformation of the public hospital network and of the achievements, failures, difficulties, and challenges the health care system still faces. Although the reform laws gave public hospitals the legal framework to become more autonomous entities, hospitals had no precedent for operating in a competitive environment, and had high labor costs and few managerial skills. The latter problems were great challenges for public hospitals to overcome on their own. In response, a modernization project tailored to the shortcomings of each individual hospital was set in place to improve both the capacity of public hospitals to participate in the health services delivery market, and their productivity and the quality of services they offered. By 2006, 179 public hospitals had already participated in this ongoing process, some with good results.

The hospital modernization experience shows that public hospitals were not able to modernize on their own, even though an appropriate legal framework was in place. Maintaining strong political will over time is necessary for successful transformation of public facilities. Skillful negotiation with decentralized governments has also been necessary to provide appropriate incentives to develop a lasting process of transformation. An appropriate allocation of resources is also required, making reshaping of the public hospital network costly and slow. The results presented here suggest that legislation, along with hospital network modernization and labor restructuring programs, improves the efficiency and quality of the hospitals: participating public hospitals have decreased their deficits and improved their market participation.

Chapter 5, by Carmen Elisa Flórez, Ursula Giedion, Renata Pardo, and Eduardo Andrés Alfonso, analyzes the impact of the reforms on financial protection of health insurance. This chapter discusses the methodological challenges of measuring financial protection and the sensitivity of results to the method used. Results show that the reforms provide substantial financial protection from catastrophic expenditure and impoverishment, benefiting all insured people in both the subsidized and contributory regimes, particularly self-employed and informally employed workers.

Finally, Chapter 6, by María-Luisa Escobar, Ursula Giedion, Olga Lucía Acosta, Ramón Castaño, Diana M. Pinto, and Fernando Ruiz Gómez, presents evidence of the impact of the reforms on the level, composition, distribution, and equity of health care financing. The chapter also examines threats to the reform's financial sustainability. The health care system is still financed by both general tax revenue and payroll contributions; however, its financial structure and the mechanics of resource flows were changed to improve equity, to extend insurance coverage to all—the poor in particular—and to improve efficiency of public spending.

The composition of financing in Colombia is now similar to that of countries that are part of the Organisation for Economic Co-operation and Development (OECD); public spending, including social security, accounts for more than 80 percent of total health spending, while out-of-pocket spending is among the lowest in the world. Results support the idea that the reforms make government subsidies for health the best-targeted public subsidy in the country. The subsidies have also had an important redistributive impact. Despite these major accomplishments, the system faces important challenges before it can achieve financially sustainable universal coverage.

Despite these encouraging results, there is still much to do and to improve. A decade after the reform, 15 percent of the population remains uninsured; benefit plans under the contributory regime and the subsidized regime still differ. There are deficiencies in the quality of care and not all public hospitals are modernized. The stewardship function needs to be strengthened; the financial sustainability of the system is continually at risk. Nevertheless, the health care system in Colombia experienced drastic changes that have benefited the health of the country's population.

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