The reform of the Colombian health sector in 1993 was founded on the internationally advocated paradigm of privatization of health care delivery. Taking into account the lack of empirical evidence for the applicability of this concept to developing countries and the documented experience of failures in other countries, Colombia tried to overcome these problems by a theoretically sound, although complicated, model. Some ten years after the implementation of “Law 100,” a review of the literature shows that the proposed goals of universal coverage and equitable access to high-quality care have not been reached. Despite an explosion in costs and a considerable increase in public and private health expenditure, more than 40 percent of the population is still not covered by health insurance, and access to health care proves increasingly difficult. Furthermore, key health indicators and disease control programs have deteriorated. These findings confirm the results in other middle- and low-income countries. The authors suggest the explanation lies in the inefficiency of contracting-out, the weak economic, technical, and political capacity of the Colombian government for regulation and control, and the absence of real participation of the poor in decision-making on (health) policies.

Privatization of health care delivery in developing countries received support from virtually all international aid agencies (1–3). Expressions such as “stewardship” and “steering rather than rowing,” used in policy documents on the global agenda for health sector reform from the World Bank and the World Health Organization (WHO) (4, 5), allude to the desired characteristics of this new public-private partnership. The recommendation that clinical care delivery be contracted out to

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private for-profit organizations, while Ministry of Health first-line facilities limit their field of operations to disease control, changes the role of the public sector to provide less and control more. Article 1.3(c) of the World Trade Organization (WTO) General Agreement on Trade in Services could even be interpreted as prohibiting the provision of health care services that are not related to disease control programs within subsidized government health services. The current wave of sector reforms is underpinned by seductive theoretical arguments (6). However, there is a lack of empirical evidence that in developing countries, private for-profit health care companies and providers can deliver high-quality care that covers entire populations (7).

Colombia is probably one of the rare developing countries that has adopted contracting-out as the key paradigm of its national health care policy and committed a sufficient budget to health care, with an increase in national budget allocated to health from 3.5 percent of GDP in 1993 to 5.5 percent in 1999 (8). This article examines evidence in the published and the “gray” literature to assess whether health care privatization in Colombia has managed to (a) improve insurance coverage, (b) improve access to and utilization of health services, (c) improve the health status of the population, and (d) control health expenditures growth. It goes on to look at the mechanisms involved and relates these findings to the country’s health policy.

FEATURES OF COLOMBIA’S REFORM

Reform of the health sector in Colombia started in the 1980s with a process of political, fiscal, and administrative decentralization. This was followed by the implementation of Law 100 in 1993, which resulted in a general system of social health security with two main features: purchaser-provider split and contracting-out. The separate effects of decentralization and Law 100 are sometimes difficult to distinguish because “at times they are synergic and at other times antagonistic” (9). Nevertheless, correlation over time can give an inkling of the causal effect of one of these reform processes.

Law 100 provided the legal framework for the creation of a decentralized social health insurance with universal coverage, based on the principles of equity, solidarity, efficiency, quality, and community participation. This ambitious proposal was made possible by petroleum discovery, providing the financial capacity to introduce a “Big R” reform (10). Two systems were created:

- The contributory system for those who can afford it, mainly the formally employed, who contribute 12 percent of their salary for health insurance. The Health Promoting Enterprises (HPE; Empresas Promotores de Salud, EPS) receive a premium per capita, adjusted according to age, sex, and geographic
location. The Obligatory Health Plan, managed by the HPE, covers a complete package of health interventions.

- The **subsidized system**, which covers the rest of the population. Funding is obtained by an input from the contributory system and by government subsidies. The capitation fee, and the accompanying package of services offered, was arbitrarily fixed at 50 percent of the value of the contributory system. Subsidized System Administrators (SSA; Administradores de Regimen Subsidiado, ARS) are responsible for the management of this scheme.

It was foreseen that by 2001 the benefits in the subsidized scheme would equal those of the obligatory plan of the contributory system (11).

A national survey (Sistema de Selección de Beneficiarios a Programas Sociales del gobierno, SISBEN) assessed the socioeconomic status of the population and categorized it in six strata (1 being the poorest, 6 the richest). Those belonging to strata 3 to 6 would join the contributory system, and the subsidized system accommodated strata 1 and 2. This was the theory. In practice, 13.7 percent of the non-poor were in the subsidized system and 10.7 percent of the poor population was registered in the contributory system (12). Health care delivery institutions (HCDI; Instituciones Prestadores de Servicios de Salud, IPS) and the autonomous former public hospitals and health centers (Empresas Sociales del Estado, ESE) were contracted by the insurance entities for health service delivery. HPE, SSA, and HCDI could be public or private or mixed, and for-profit or not-for-profit.

The state assumed a steering role of policy formulation, monitoring, and evaluation, freeing itself quasi-completely from directly offering services. Exceptions were activities with high externalities (mainly disease control programs) and health care delivery for the uninsured (the *vinculados*). Managed competition between public and private providers of care, with free choice of insurer by the population, would safeguard the quality and efficiency of health care. In practice, the provider was chosen by the insurer, limiting people’s freedom to choose a provider to an indirect option.

**INSURANCE COVERAGE**

Two achievements were claimed to illustrate the success of the Colombian health reform:

- A considerable advance in social insurance coverage following the health sector reform. Health insurance almost doubled between 1992 and 1997, from 26 to 52 percent of the population (13) (Figure 1).
- A growth in health insurance coverage that was highest among the poor: coverage in the poorest 10 percent of the population rose from 4 to 41 percent
between 1992 and 1997, a tenfold increase, whereas the increase among the richest 10 percent was from 65 to 80 percent (13).¹

Let’s assess these claims. First, although before the reform 69 percent of the population did not have any form of insurance, this does not imply that they did not receive medical treatment. The reform entailed a shift from a supply-oriented model (without the need to register) to a demand-oriented model (14). According to the National Household Survey (Encuesta Nacional de Hogares) of 1992, dating from before the reform, 81 percent of the population claimed to have access to health services (15).

Another issue is equity in insurance coverage. Most poor people were not covered by the pre-reform health insurance, which was mainly for the officially employed. The tenfold increase in coverage from 4 to 41 percent for the poorest 10 percent of the population differs greatly from the progress among the richest 10 percent (from 65 to 80 percent), but insurance coverage among the poor is

¹ Most information is derived from two national surveys: the National Household Survey (Encuesta Nacional de Hogares) of 1992 with data from the pre-reform period, and the National Quality of Life Survey of 1997, conducted three years after implementation of the reform. Much of our discussion therefore compares the 1992 and 1997 situations.
still only half that of the rich. Furthermore, only one-quarter of the newly insured entered the subsidized system, while the rest enrolled in the contributory scheme (13). The largest share of expansion of enrollment in the contributory system was due to incorporation of family members and dependents of those previously covered by the social security regime—an increase in family coverage from 18 percent of members to 100 percent (16). This increase was thus not accompanied by an increase in revenues from contributions, as these still consisted of 12 percent of the salary of those officially employed.

In fact, the curve depicting the evolution of the percentage of people enrolled shows a stagnating trend over several years (see Figure 1). More than 40 percent of the population remains without health insurance—more than 16 million people. These vinculados receive treatment in public hospitals against a payment of 30 percent of the actual cost, as a continuation of the pre-reform supply-oriented model. Most of these people are in the lower income groups. Figure 2 shows the distribution of these vinculados over the different income groups. This distribution casts doubt on the process of equity, as the difference in improvement between the lowest and highest income groups is less impressive and the coverage increase is similar across income percentiles. For example, in income percentile 1, the percentage of uninsured diminished 37 percent, and in percentile 10 dropped 35 percent (15). The largest proportion of uninsured population—the challenge to achieving universal coverage—remains in the lowest income groups.

The number of persons enrolled in a health insurance scheme has stagnated at around 55 percent since 1998 (Figure 1). Twenty-five percent of the two

Figure 2. Percentage of uninsured (vinculados) as function of income percentile, 1992 and 1997. Source: Colombia Country Management Unit, PREM Sector Management Unit (13). Graphed by authors.
richest deciles remain outside these schemes, because they have the means to opt for private insurance, thus avoiding responsibility for solidarity. Furthermore, two-thirds of those eligible have not enrolled in the subsidized system, although their enrollment is free. The lack of information available to the poor, the prime target group of the reform mechanisms, has sometimes been invoked to explain this (17). But ten years after implementation of Law 100, this is unlikely. Even if the government and insurance companies were not duly informing people, information would have spread by word of mouth if the health services were providing effective, affordable care. Rather, the failure to interest the poorest Colombians could be rooted in the reform process itself.

While Law 100, Article 153, states that “the General Social Health Insurance System will gradually provide health services of equal quality to all the inhabitants of Colombia, independent of their capacity to pay,” the creation of two different systems runs counter to this objective. Insufficient solidarity between rich and poor, reflected in the financing schemes, results in a package of services for the subsidized system that is generally only half of a reference standard of what is possible and necessary in Colombia—that is, the package of the contributory scheme (18). For instance, hospitalization in an internal medicine ward or follow-up for chronic diseases—which typify the epidemiological transition—are excluded from the subsidized package (e.g., diabetes; cardiovascular diseases other than hypertension). The reluctance of those in the poorest percentiles to enroll in the subsidized system might reflect a refusal of such a package—even if fashioned along a cost-effectiveness rationale. An additional explanation—cream-skimming (risk selection)—could be invoked if data on insurance coverage of the poor by private companies were available (we did not have access to such data).

It has been argued that only those with full insurance coverage should be counted when determining enrollment rate (18). Those with half the package (in the subsidized system) cannot really be considered insured, as they are entitled only to essential clinical services, some surgical interventions, and the treatment of catastrophic diseases (14). This is important, as the law foresaw an equal health plan for all. In practice, the health plan of the subsidized system has never exceeded 70 percent of the contributory system package (19).

Finally, insurance coverage was overestimated because of multiple enrollments. In a survey in March 2000, 2.3 percent of the population (500,000 people) declared that they held more than one insurance card. People enroll with different insurance companies with the futile idea of getting better care—although all companies offer the same legal package. Further distortion of insurance estimates may be related to the fact that some names are not immediately erased from an insurance list while the individuals are changing insurer or losing their job (14). This frequent practice permits insurers to obtain the full capitation fee while providing a fraction of the required care.
ACCESS TO AND USE OF HEALTH SERVICES

What does “enrollment in a health insurance plan” really mean? Basically nothing more than a person holding an insurance card. Indeed, several obstacles keep cardholders from accessing health care services (17):

- Some insurance companies have declared persons or families, especially the poor, to be registered for their scheme without issuing an insurance card, thus collecting premiums without providing service.
- The poor are frequently unaware of their rights. They do not know how to use their insurance card, and they continue to pay for the services they receive.
- Sometimes, they simply do not use the services because of a lack of psychological, intra-institutional, financial (see below), or geographic accessibility.

Investigations about enrollment are abundant because data are easy to obtain, but evidence on actual access to care is rare, and data on real utilization of the health services even more so.

A comparison of pre-reform 1992 National Household Survey with 1997 National Quality of Life Survey data suggests an improvement in access to care in absolute numbers. However, when converted to the percentage of population covered by health insurance who report receiving treatment when sick, the comparison reveals a reduction of 3 percent (13). This lower treatment rate may in part be attributable to the larger demands placed on the system.

Other proxies permit one to indirectly assess access to care:

- High percentages of death without diagnosis are typical of poor municipalities with a high prevalence of unsatisfied basic needs. In Colombia, institutionally certified mortality is higher in the richer municipalities: 50.5 percent for stratum 6, according to unsatisfied basic needs, versus 28.6 percent for stratum 1 (12).
- Yearly doctor utilization rate: before the reform, 61.7 percent of people needing health care were actually seen by a doctor. In 2000, this proportion had fallen to 51.1 percent (13, 20).

Copayments—meant to put a limit on demand related to moral hazard—can also limit access to health care (21). Admittedly, in 1992, 51 percent of patients did not consult a doctor because they lacked the money to do so (1992 National Household Survey), versus 41 percent in 1997 (17). But this is certainly not an impressive gain, even if the data are reliable despite different methodologies in the two surveys. Moreover, national rates erase significant geographic fluctuations, ranging from 29.1 percent in Bogota to 62.2 percent in the poor Atlantic region (22). In the population without health insurance, finances remained the first
obstacle to consulting a doctor, and for insured persons was the second (perceived lack of seriousness of the illness was the first) (16).

DISEASE CONTROL AND HEALTH INDICATORS

In the decades preceding reform, Colombia, like most developing countries, underwent a decrease in most morbidity and mortality indicators. This trend changed direction in the second half of the 1990s.

Infant mortality rate is known to reflect general social and economic conditions, not just access to medical care (23). However, child mortality due to acute respiratory infections and acute diarrheal diseases can be considered avoidable mortality and these deaths can be used as tracer pathologies for quality of care (24), also in less developed countries (25). These deaths are clearly on the rise since 1997 (12). Disorders of the perinatal period, including perinatal mortality, are also known to be an indicator for access to quality health care. The rate doubled from 1996 to 1997 and continues to rise (12).

A decline of vaccination coverage was documented both at local (26) and national levels (22). Between 1990 and 2000, the national coverage for total vaccination of children below 1 year of age dropped from 67.5 to 52 percent (20), even more in rural areas (27). This deterioration could be related to excessive emphasis on programs that adhere to an explicit demand (28), difficulties in accessing vaccination services, excessive procedures and documentation requested by the insurers (26), and decreased budgets (29).

Malaria and tuberculosis control and the Extended Program of Immunization (EPI) are vertical disease control programs in Colombia. They form an important part of the public health functions assumed by the government. Malaria transmission was on the increase, and the magnitude of the rise cannot be explained just by better diagnosis and by environmental conditions (El Niño 1997–1998). A decline of protective measures due to the decentralization process and fragmentation of responsibilities probably contributed to the problem (30).

In line with Pérez (31), data on tuberculosis control can give some insight into the functioning of the whole Colombian health system, as suspicion of TB (and often diagnosis) occurs in the private sector while treatment and follow-up are the responsibility of Ministry of Health services. The steady and progressive decline in TB incidence reversed trend in 1997 and rose steadily, from 8,042 reported cases in 1997 to 11,261 in 2002 (31). At the same time, the already low notification rate further deteriorated with the introduction of the social security system, to reach an all-time low of 20 to 25 percent (see Figure 3). Other studies have shown a marked decrease in the number of TB patients under treatment (30).

It is difficult to disentangle the numerous determinants of TB incidence, among them Colombia’s five-year recession and the HIV epidemic. However, some control programs’ organizational features, related to the Colombian reform, have probably played a significant role:
The reform caused fragmentation of responsibilities of the different aspects of diagnosis, treatment, and follow-up of patients and contacts (30). Insurance companies and private health care providers are not prepared to spend time and resources on activities that are not rewarded financially (32, 33). Lack of health care–disease control integration is known to reduce detection and cure rates while increasing delays for patients (34).

FINANCING

Health expenditure has skyrocketed since the introduction of managed competition in Colombia. On theoretical grounds, the trend could have been predicted as inherent to the system (35). It has also been observed in other countries that have introduced a system based on a demand-oriented model (36), from the United States (37) to Lebanon (38) and Vietnam (39).

The efforts of the Colombian government to increase its health care budget did not prevent private expenditures reaching 45 percent of total health expenditure in 1999 (more than 60 percent were out-of-pocket payments, the rest mainly employers’ contributions). This is why, in a list of proportion of households with catastrophic health expenditure, Colombia ranked fourth out of 60 countries, after Vietnam, Brazil, and Azerbaijan (40). The cost escalation is probably due to the financing method. Rise in cost per capita for the contributory system (74 percent between 1997 and 2002) was comparable to the changes in the subsidized system.
(88 percent for the same period). By contrast, the cost per capita for those who continued to be served by a system based on a supply-oriented model (the vinculados) remained under control between 1997 and 2002, increasing by 36 percent (Figure 4).

Although there was no strict regulation of contracts between providers and suppliers, there was a tendency to contract general practitioners on salary and to reimburse specialist and hospital services and procedures on a fee-for-service basis (41). Such a practice induced overconsumption of expensive care. Figure 5 shows that costs of health care delivery were out of control in the 1990s, probably because of this stimulation of high-cost care. Besides, the majority of the hospitals fulfilled both first- and second-line functions—despite evidence showing that the costs of handling first-line disorders increase with the institution’s complexity (42).

Finally, the complex administrative structure has absorbed a substantial amount of funds (Figure 6). In 2001, 52 percent of the capitation fee was still spent on administrative costs (14). In 1995, only 10 percent of the resources assigned to the subsidized system was spent appropriately, the rest was diverted into bureaucracy costs, frozen in bank accounts, or used in sectors other than the health sector (28). This finding echoes the comparison between Canada, which has a health system with a single purchaser and administrative costs representing 16.7 percent of health expenditure, and the United States, which has a health system with multiple purchasers and where this share of costs is 31 percent (43).

![Figure 4. Evolution of cost per capita for the contributory and subsidized systems and the uninsured ("vinculated"), 1997 to 2002. Source: Departamento Nacional de Planeación et al. (8). Graphed by authors.](image-url)
Figure 5. Public, private, and total health expenditures, 1993–1999. Source: Ministry of Health of Colombia et al. (14). Graphed by authors.

Discussion

Can these disappointing outcomes be linked to the reform? Colombia’s prolonged civil war has frequently been invoked to explain the poor results in the coverage, cost control, and impact of the health insurance system. In 2001, 190,500 new refugees were registered in Colombia, bringing the total number of internally displaced persons (IDPs) to 720,000 (44). Although this number puts Colombia in the second rank of countries with IDPs, it represents only 1.7 percent of the total population, far from the target of 40 percent that must be included in the health insurance scheme to reach universal coverage.

Rather, we believe it is the inefficiency of the reform’s approach, contracting-out, that has undermined Colombia’s health care reform. Total expenditure on health as a percentage of GDP stagnated at 3 percent during the period 1990–1995 (45). In 1993, Law 100 was introduced at the behest of international development agencies (46). This process attracted widespread support from sectors with significant influence on state decision-making, such as senior health managers, pharmaceutical companies, medical manufacturers, and international health insurance corporations (47). The Colombian government tried to accommodate their wishes (48).

This conjunction of interests explains why health care expenditure almost doubled by 1997, to 5.5 percent (2), while health care coverage remained below 55 percent and actual treatment rates decreased. The World Bank claims that countries with structural adjustment programs spend more on health through public provision (49). Hypothetically, in Colombia as in other countries, the bulk of this “medical inflation” has been channeled to the private sector, the extent of which remains to be calculated.

The Colombian state has proved unfit to regulate and control the private sector. Is this a specific or a general feature of middle (and low) income countries? Let’s examine whether the public authorities in such countries possess the economic, technical, and political capacity to face this challenge.

First, European governments hold the purse strings; developing countries’ administrations do not. Although the available data are not always reliable, the public share within total health care expenditure is obviously far greater in western Europe than in developing countries. Public expenditure as a percentage of total expenditure on health amounts to 77.5 percent in Germany, 76.9 percent in France, 96.9 percent in the United Kingdom, and 83.2 percent in Belgium (2). By contrast, public expenditure on health care represents 54.5 percent in Colombia, 48.7 percent in Brazil, 24.9 percent in China, 13 percent in India, 36.8 percent in Indonesia, and 28.2 percent in Nigeria. This paucity of funds also explains why so few developing countries have managed to apply the demand-side reforms recommended by the World Bank.

Second, as Figueras and Saltman (50) acknowledge, the success of reform strategies in Europe required “the availability of public health skills to assess
health needs, evaluate interventions and monitor outcome.” The management skills required for contracting-out and regulating contractual arrangements seem well beyond the capacity of many developing countries, including middle-income countries. One of the few published studies on contracting-out to the private sector underlines the difficulties encountered in South Africa, a country with a mature public administration system (51). The author concluded that “these problems are likely to occur to an even greater extent in countries with less well-developed systems of administration,” a conclusion shared by the authors of a case study from Zimbabwe (52).

Efforts by public authorities in the less developed countries to set care standards among private providers have remained inconclusive (53, 54) or failed (55). In Europe, as Figueras and Saltman (50) observe, in contrast to supply-side reforms, “the existing evidence, taken together, appears to indicate that reforms have been decidedly more fraught—financially, politically, socially, and even clinically—when undertaken on the demand side, specifically in the application of market-style incentives to individual patient-based demand. Measures such as choice of insurer, increased cost sharing at the point of use, or removing services from the publicly financed package of care have generated both equity and organisational problems.” These problems are even more acute in developing countries, where purchasing power is much lower.

Research suggests that contracting-out is an acceptable alternative to public provision, if the following conditions are met: (a) real competition exists between competent and substantial private providers, (b) there is adequate government capacity to assess needs and to negotiate and monitor contract terms, and (c) a legal and political environment exists that can enforce regulations and resist patronage and corruption (56). In industrialized countries, it is clear that “Managed market . . . success will ultimately depend upon improvements in the underlying organisation, structure and functioning of the public sector” (57). Based on these criteria, the only settings in developing countries where monitoring could be effective are urban centers in a few middle-income countries with elaborate political and administrative structures and real competition between providers. Apparently, Colombia is not a member of this club.

Third, the relative success of contracting-out in France, Germany, and Belgium arose in a particular political and socioeconomic context. Medical costs as a percentage of GDP are lower in Europe than in the United States, because of the supply-side cost-sharing. Although the “poorest” still experience problems of access to health care, they represent only a minority in western Europe. The main reason why these governments were able to secure access to (private) health care for the majority is that low-income groups managed to have their interests defended within the political system. In western Europe, workers’ parties and mutual aid associations have been included in government health policy planning and administrations since 1945 and have acted as a counterweight to the vested interests (58). In Europe, social and health care policies were largely defined by
“the poor” and their representatives, while in the United States and Colombia, policies for “the poor”—in line with those favored for developing countries by U.N. agencies—failed to improve social standards and to reduce medical costs. Health expenditure in the United States as a proportion of GDP is now the highest, by far, of all industrialized countries.

Unlike in Europe, the poor are rarely represented in the ruling circles of developing countries and so play little part in shaping health care policies or setting budgets. The Colombian reform aggravated this situation by undermining people’s attempts to develop community health services (48). This is a familiar feature of administrations in developing countries, when a ruling elite uses its monopoly power to weaken solidarity between rich and poor and so increase income inequality (59).

In conclusion, the skyrocketing costs linked to the Colombian reform cast doubts on the efficiency of the new social security system, more so because the increase in spending is not related to an increase in real access to health services or to improvement in disease control. The impressive increase in public and private funds did not prove to be value for money. The Colombian case seriously undermines claims that the neoliberal international aid policy is evidence-based.

REFERENCES

29. Same as 27.


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