1-1-2013

Universal Healthcare in Colombia: An Effective Reform?

Madeline Weiss
Lehigh University

UNIVERSAL HEALTHCARE IN COLOMBIA: AN EFFECTIVE REFORM?

Madeline Weiss

Introduction

Transforming from a nearly failed state in the latter half of the 1900s to a comeback success in the early 2000s, Colombia has undergone enormous social, economic, and political changes throughout the past few decades. The implementation of a universal healthcare program remains a crucial aspect of the improved Colombian state along with the application of human rights laws and development of heightened security. Colombia's universal healthcare, a feat that many of today's advanced countries have yet to achieve, provides access to services for nearly all citizens. With a 97 percent coverage rate in 2012, Colombia is close to reaching the goal of complete coverage (Webster, p. E289).

As part of a larger social program agenda in 1991, President Cesar Gaviria Trujillo introduced a universal healthcare plan to end inefficiency and equity problems in healthcare. Incorporated within the 1993 Colombian Constitution, all citizens are entitled to *derecho a la salud* (the right to healthcare), whereby "all citizens, irrespective of their ability to pay are entitled to a comprehensive health benefit package" (El Congreso . . .). With a predetermined healthcare budget, however, spending is limited; and the important question arises of how to best utilize healthcare expenditures to create maximum results. This article evaluates the overall effectiveness of the universal healthcare system in Colombia and analyzes four main structural inefficiencies within the universal healthcare system, which significantly hinder its success. The article also proposes fiscal solutions to the inefficiencies present in universal healthcare in Colombia.

Background of the Colombian Healthcare System

Prior to the 1993 healthcare reform, Colombian healthcare was segmented into three separate systems, which were all utilized

simultaneously: the public system, the insurance system, and the private system. The public system was a government-financed operation, aimed at low-income and unemployed citizens not protected by any type of health insurance. Public care centers were financed directly through government spending, receiving subsidies for treatments and medications supplied to patients. This type of funding direct from the government to care centers is known as supply-side healthcare financing (Clavijo and Torrente, p. 538). Because an estimated 70 percent of the population in 1985 was reliant on a small pool of resources in the public financing system, inefficiencies and inequities existed in the provision of healthcare services (Gaviria et al., p. 30). The insurance system was aimed at those Colombians in formal employment[1] and was financed by payroll contributions from employees and employers. Lastly, the private system served high-income individuals, who were billed directly for their own medical insurance. The incentive to be enrolled in the private system was that it provided a higher quality of care and better access to health services. High levels of inequality existed in the pre-reform system, in that access to complete healthcare services was extremely limited for those enrolled in the public system.

Healthcare coverage prior to 1993 was ineffective both in terms of equity and financing. Before the 1993 reform, an estimated 25 percent of the population was not able to access healthcare services under the public system because insufficient healthcare infrastructure, human resources, and medical goods prevented individuals from physically receiving care (Plaza et al., p. 48). Additionally, an estimated 60 percent of hospital admissions were from privately covered citizens, suggesting a relatively expensive healthcare system in terms of the cost of care and treatment (Miller et al.). With substantial income inequality problems, an expensive healthcare system was not suited to the aggregate healthcare needs of the Colombian population (Clavijo and Torrente). Low levels of insurance coverage further contributed to inequities in healthcare provisions.

The pre-reform system relied on three sources of financing—general tax revenue, payroll contributions, and personal expenditures. However, these three financing mechanisms were not efficiently organized, in that they were not pooled into one financing mechanism. Additionally, financing mechanisms prior to the 1993 reform were ineffective because there were no specific health funds allocated within the national budget (Glassman et al., p. 161).

The 1993 Reform: Creation of Universal Coverage

Often referred to as one of the largest social reforms ever undertaken in Latin America, the 1993 Colombian health reform was implemented under Law 100 of the constitution to create universal healthcare coverage through the immediate development of a subsidized healthcare system (Gaviria et al., p. 7). In this case, healthcare coverage is defined as access to a predetermined package of basic health services. The predetermined package of benefits provides financial protection for individuals by spreading the financial risks of healthcare among a large group (Giedion and Uribe, p. 860).

Although Colombian government officials set the goal of achieving 100 percent coverage, Colombia has yet to experience full healthcare coverage. Nonetheless, Colombia has achieved significant progress, with an estimated coverage rate of 97 percent as of 2012 (Webster, p. E289). The expansion of coverage from the beginning of the 1990s to 2006 represents an increase of 84 percent in urban areas and a near sevenfold increase in rural areas (Clavijo and Torrente).

The 1993 reform divided Colombian healthcare into two separate regimes, the Contributive Regime (CR), known as the Plan Obligatorio de Salud, and the Subsidized Regime (SR), known as the Plan Obligatorio de Salud Subsidiado. The CR was created as a system by which formal sector workers and their employers would contribute a predetermined percentage of earned income directly to insurance carriers. The overall tax rate is 12.5 per-

[1]Formal employment is defined as working for a company registered with the state and within the guidelines of state regulation. Under formal employment, income is reported to the government and thus taxed (Mance). Informal employment is defined as working outside the government-regulated sector.

cent, with 4 percent paid by the employee and 8.5 percent paid by the employer (Tsai, p. 110). Both employee and employer contributions are paid directly to an insurance company, which the employees themselves are allowed to individually select. Upon receiving a payroll contribution, the insurance company is mandated to deduct 1.5 percent of the total contribution, known as the *solidarity point*, to transfer to SR funding (Gaviria et al.). All formal sector workers are allowed to participate in the CR. The CR package includes all levels of care provision, including preventative care, public health education, outpatient services, dental care, maternity and sickness leaves, and catastrophic care (Pinto and Hsiao).

The SR, on the other hand, was created for those without insurance and otherwise unable to afford health expenditures out of pocket. Like other progressive taxation principles in Colombia, the SR system gives benefits only to those most in need. Only Colombians identified as in the worst economic condition are allowed to enroll in the SR. Beneficiaries of the SR receive subsidies to purchase a limited package of health insurance benefits at the same rates available to those in the CR from one of multiple insurance carriers (Miller et al.). The package of healthcare benefits offered by the SR covers only primary and catastrophic care, with limited provisions for hospital care and maternity and sickness leaves (Pinto and Hsiao).

The SR is funded through government taxes plus the solidarity point contributed by CR members as a fraction of their employment taxes. Once collected, government health taxes are transferred from the national government to regional entities. The total annual cost to the government of providing healthcare coverage to the estimated six million people under the SR is USD $1.3 billion, or about 1 percent of Colombia's overall GDP in 2005 (Gaviria et al., p. 38).

Despite the 1993 reform, there are still some people (about 3 percent of the population) who are left without formal health insurance coverage. Those who are not formally employed nor qualify for subsided enrollment receive care from the network of public healthcare centers but must pay for their health expenditures out of pocket (Arbelaez et al.).

The Selection Process for Subsidized Care

Colombians are selected for the SR if they are regarded as in the lowest economic tiers in Colombia. Using the Sistema de Selección de Beneficiarios de Programas Sociales (SISBEN) (System for Selecting Beneficiaries of Social Spending) proxy means test, all Colombians are classified into one of six levels of socioeconomic well-being. Only the two lowest levels are allowed participation in the SR. The SISBEN index was implemented as a means of determining an equitable and objective measure of need within society. Based on an assessment of living conditions for individual families, the SISBEN index takes various household factors into consideration when determining socioeconomic condition (World Bank, 2007).

The SISBEN index attempts to measure poverty using many different qualitative and quantitative variables. In order to create an accurate depiction of economic need, factors used in the SISBEN index must be reliable and easily identifiable. Thus, the SISBEN index takes into consideration the following: housing quality and possession of durable goods, access to public utility services, human capital levels, family demographics, unemployment, and dependency ratios. Possession of durable goods includes specific qualifying property, including ownership of the housing site, refrigerator, television, fan, and washing machine (Vélez et al., p. 9). It is important to note that even though unemployment status is taken into consideration, income is not due to the lack of reliable reporting stemming from informal employment.

Although the national government is responsible for determining the criteria used in the SISBEN selection process, the local municipal government is responsible for measuring Colombians' scores on the SISBEN index and for selecting the beneficiaries of national government spending. In determining SISBEN scores, each municipal government conducts interviews with residents in the poorest areas of each community. If a person would like to interview to qualify as a recipient, he or she can make an appointment with the local municipal office. Once SISBEN administrators identify the areas to be surveyed, they personally

conduct interviews with the individual households. When the survey is finished, the respondent in the household signs and then finalizes the survey (Vélez et al., pp. 8–15).

The SISBEN selection process has been both praised and criticized for its methods of evaluation of need. The World Bank fully supports the use of the SISBEN selection process, stating that it is a "technical, objective, equitable, and uniform mechanism" of selecting beneficiaries (World Bank, 2007, p. 2). By creating a uniform selection process, the SISBEN index is praised for giving ultimate selection power to the municipal governments, thus promoting democratic governance through participation. Increased power given to municipal authorities is said to have improved the impact of social spending, because each municipal authority tailors its own spending distributions to a budget that works best for it (World Bank, 2007). The SISBEN index has been criticized because it provides local governments the authority to manipulate SISBEN data to receive more funding. The index has also been criticized for its poor logistical implementation (discussed later).

Effects of Healthcare Reform

The effectiveness of a universal healthcare system can be evaluated through its participation rates. In theory, higher participation in the healthcare system results in positive healthcare indicators (such as a higher life expectancy) for Colombian citizens. Universal healthcare provides financial protection for those seeking medical care by spreading the financial risk associated with costly healthcare over many individuals. The 1993 reform significantly decreased the economic barriers to healthcare for citizens of all income levels, but the poor were those affected most positively by the implementation of universal healthcare (World Bank, 2007, p. 3).

The improved utilization of health services comes from the SR, which has been called "one of the most important health interventions in Latin America" (Gaviria et al., p. 17). Examining the probability of use for specific services, authorities can ascertain a measure of success of universal healthcare. Compared with the uninsured, the insured population has higher probabilities of using ambulatory consultations, bringing sick children to the hospital, giving birth to children in the attendance of a health professional, and attending well-child doctor visits, thus increasing the overall health of the Colombian population (Gideon and Uribe, p. 6). Similarly, the insured population has a higher probability of utilizing preventative care. In 2003, 65 percent of insured people visited a doctor or dentist for preventative reasons whereas only 35 percent of the uninsured did so (World Bank, 2007, p. 4). Overall, the healthcare gap between the rich and the poor has been reduced significantly as a result of universal healthcare under the SR and CR (Branco et al., p. 10). Because there has been a significantly higher utilization of preventative care and health services after the 1993 reform, the universal healthcare reform in Colombia can be considered effective. Moreover, average life expectancy for Colombians in January 1993 was 68.87 years whereas as of 2013 it is 73.43 years.

Inadequacies within the Healthcare System

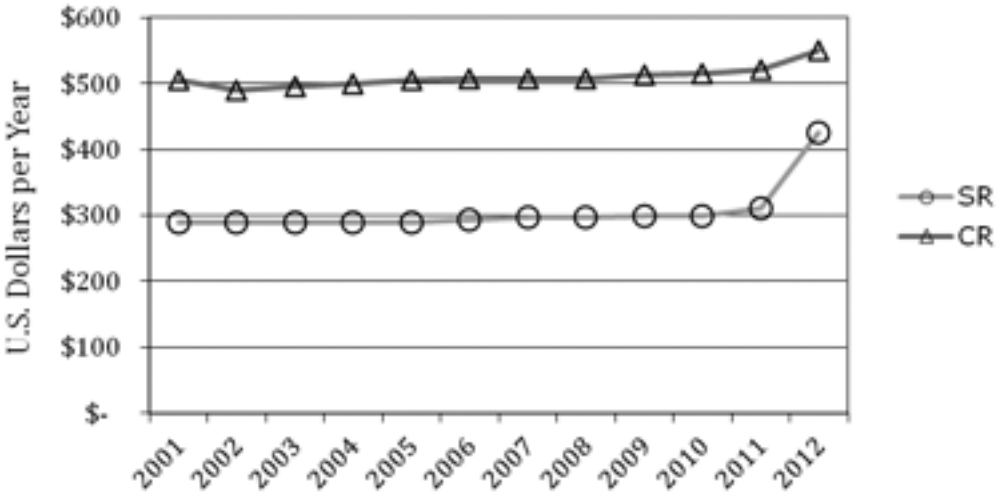
Despite the obvious successes of this system, the full potential of developing universal healthcare has yet to be realized (Miller et al.). There are still four major inadequacies within the Colombian universal healthcare system, which are the result of legal, financial, and selection processes. These inadequacies hinder the ultimate success of a universal healthcare plan in Colombia; they are the protection of constitutional rights, changes in healthcare financing, selection process for subsidized enrollment, and participation rates in subsidized and contributory healthcare plans.

Protection of Constitutional Rights

The protection of the constitutional right to healthcare is a significant issue for Colombian citizens. Because the government guarantees a "comprehensive health benefit package" under Law 100, all Colombians expect fair and equal healthcare treatment. When a citizen's right to healthcare has been withheld, a citizen may initiate a claim for a *tutela*—a petition to the federal court arising from the withholding of a constitutional right, thus a legal

Figure 1

Value of Total Benefit Package per Enrolled Member



Source: Chernichovsky et al.

inefficiency within the universal healthcare system. For instance, a Colombian participating in the SR could initiate a tutela should the citizen not receive healthcare benefits included in the SR package, such as assessment of a medical condition, laboratory tests, or medication. Tutelas can also be claimed for the long waiting times forced on patients by insurance companies (Bernal et al., p. 1). Paradoxically, tutelas can also be claimed for services that are not included in the standard SR benefit package (Chernichovsky et al., p. 23). If a Colombian feels that his or her right to a comprehensive health benefit package has been compromised in any way, a petition can be made to the federal government to receive payments for increased health benefits (El Congreso . . .).

Tutelas have become increasingly common since the inception of universal healthcare. Specifically, since 2000 the frequency of healthcare-related tutelas has dramatically increased from 21,301 in 1999, to 42,734 in 2002, to 90,000 in 2008 (González and Duran, p. 54). The federal court frequently rules in favor of the Colombian citizen, leading to high compensatory expenses for the federal government (Barrero, p. 3). Because healthcare-related tutelas contribute to such a large percentage of federal court claims, the Colombian Constitutional Court required that the national government correct the failures within the healthcare system in 2009 by increasing the benefit package value for SR members. Compensatory expenses peaked in 2010, significantly depleting the solidarity point reserves from CR contributions, causing a state of social emergency in health (Chernichovsky et al., p. 10).

Since the implementation of universal healthcare in 1993, few benefits have been added to the SR package. In an attempt to redress tutelas related to the exclusion of healthcare procedures, the federal government recently included 163 new treatments and procedures in the SR beneficiary plan (with various compliance dates throughout 2010 and 2011) while at the same time drastically increasing the total benefit package per enrolled member, as shown in Figure 1 (Bernal et al., p. 1).

However, the government was not transparent when it increased the benefit package value in 2009, and it remains unclear to hospitals how they will be reimbursed for newly added healthcare services (Bernal et al., p. 2). In order to manage, and even lower, the number of tutelas, the government must revise and expand the package of benefits available to SR beneficiaries and do so in a comprehensible manner. Further raising the benefit package

value, however, requires immense resources that the government does not possess.

Tutelas are the only legal remedy available to Colombian citizens to gain equitable healthcare and are thus important in protecting citizen's constitutional rights (Abadia and Oviedo, p. 1158). Although tutelas are an indication of the constitutional rights withheld from citizens, there are many more unreported and undocumented cases of insufficient healthcare. The growing numbers of tutelas over recent years indicate that basic care benefits are not sufficient for citizens enrolled in the SR, who expect to have the right to healthcare.

Changes in Healthcare Financing

Before the reform, the supply-side system allocated government funds directly to healthcare providers. Since the reform, the new demand-side system has allocated funds and resources directly to the users of the healthcare system to then spend on receiving healthcare. Individuals under the demand-side system are now subsidized in their purchase of health insurance with government subsidies financed from public resources (Miller et al., p. 4). Thus the demand-side system has put increased pressure on healthcare providers to attract patients, which is an inherent financial problem under the 1993 reform.

The switch from supply-side to demand-side healthcare economics encourages market competition among healthcare providers, because they must now compete against each other for patients. Thus, the demand-side model is referred to as the managed competition model. Under managed competition, there is increased pressure on healthcare providers to provide health services at a lower cost, thus increasing their efficiency and ability to make a profit. But while managed competition has the potential to lower costs and reduce unnecessary expenditures, it may also lead to considerable inequities in the system (Barona et al., p. 44). Although it was the hope of policymakers that managed competition would simultaneously lower healthcare costs and increase the quality of healthcare, the reality is that lower healthcare costs have decreased the quality of healthcare received under the subsidized regime (Trujillo et al.).

Through the demand-side healthcare system, competition among hospitals was increased. Thus, under the 1993 reform, all public hospitals were effectively forced to compete with private hospitals. In an effort to increase efficiency, public hospitals had to institute new administrative, accounting, marketing, and billing procedures, which have proved to be time consuming and expensive (Barona et al., p. 49). Similarly, healthcare administrators had to remain up to date with the logistical aspects of universal healthcare and transform their operations accordingly. Not only did public hospitals have to adjust to new administrative systems but also, more importantly, they had to adjust to the large influx of new patients.

More than seven million Colombians were introduced to the healthcare system under the 1993 reform, and SR participation continues to grow at a high rate (Barona et al., p. 46). Although this is a great social accomplishment, "Colombia does not have the ability to pay for every intervention for every patient," admits the director of the Manager of Health Care Demand for the Ministry of Social Protection, Lenardo Cubillos (Tsai, p. 110). The inability of public hospitals to offer treatment for every patient is seen by the lack of acceptance of public insurance at many hospitals. Citizens participating in the SR are entitled to receive some healthcare services under the constitution, but they often do not receive healthcare services due to limited sources of public financing (Webster, p. E289).

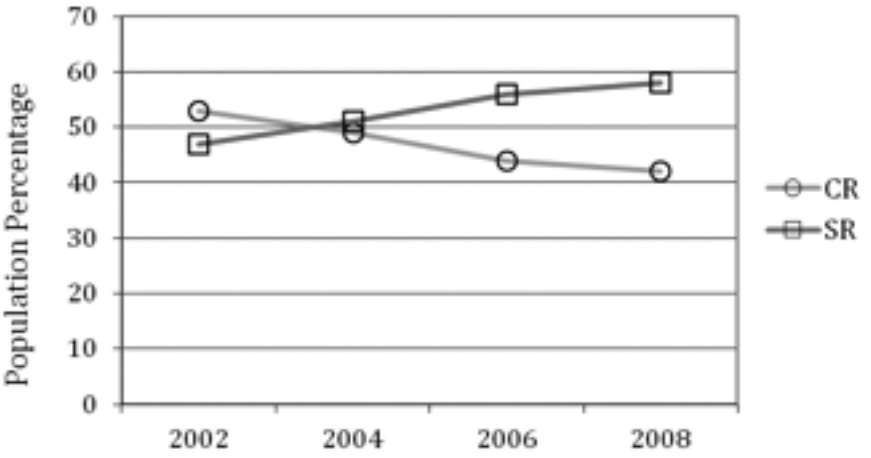
Although equity in healthcare theoretically should exist for all citizens regardless of their participation in the SR or CR, the extension of health benefits to all citizens has brought with it fiscal consequences (Tsai, p. 110). In 2011, President Santos reported, "Healthcare is not a business and should not be approached as a business" (Colombia Reports). However, in order to create a successful and long-lasting universal healthcare program, fiscal restrictions must be imposed on healthcare spending.

Selection Process for Subsidized Enrollment

A third inadequacy of the 1993 reform is the selection process for enrollment, which is an important aspect of universal coverage.

Figure 2

Percentage of the Population Affiliated with Each Regime



Source: Calderón et al.

The selection process for subsidized enrollment, which uses the SISBEN index, has been criticized for several reasons. Municipal authorities both administer the SISBEN survey and receive funding. Thus, incentives exist to overstate the need for funding. As more needy municipalities are given more funding, there are strong incentives for municipal authorities to manipulate SISBEN eligibility data to appear more in need of federal funds than is the case. Weak federal monitoring and evaluation of SISBEN selection data of the 1,098 municipalities is a cause of poor financial performance and distribution of government funds. In order for the system to be successful, the SISBEN index must be administered and checked by accountable officials, preferably national government employees (Castañeda, p. 21).

Additionally, there are many criticisms of the implementation of the logistical aspects of the SISBEN index. As local governments identify households to be interviewed, the most rural areas and isolated communities are often ignored in the process. Although citizens have the right to request an interview for the SISBEN selection process, those living in rural and isolated communities may not be aware of their right to be interviewed or even their right to healthcare. Because local governments hold ultimate authority over the beneficiary selection process, complainants often note that certain communities receive preferential treatment over others. Lastly, as population centers vary with respect to urban and rural areas, it is questionable whether the uniform SISBEN interview is suited to the aggregate needs of each and every household (Barona et al., p. 46).

Participation in the Subsidized and Contributory Programs

A final inadequacy of the 1993 reform is the proportion of the population affiliated with each healthcare regime. From 2002 to 2008, there was a significant increase in the proportion of the population affiliated with the SR, while there was a simultaneous decrease in the proportion of the population affiliated with the CR, as shown in Figure 2. Changing participation rates in the subsidized and contributory regimes have caused a funding deficiency throughout the past decade, with Colombia experiencing its largest healthcare deficit in 2010 due to the significant depletion of its reserve SR healthcare funds. However, the changing affiliation rates associated with each regime indicate that healthcare coverage is expanding to include the previously uninsured population. As healthcare coverage approaches 100 percent, it becomes more costly for the government to finance healthcare, and thus the depletion of SR funds has occurred. Still,

changing SR and CR affiliation rates can be viewed as a positive indicator of the effectiveness of healthcare reform.

With insufficient funding, the effectiveness of universal healthcare is limited (Clavijo and Torrente, p. 537). To face the growth in the SR and the decrease in the CR, government officials had to increase the percentage contribution of the solidarity point from 1 percent to 1.5 percent in 2007 (Conferencia Interamericana de Seguridad Social). So as not to increase the tax burden on salaried employees, this extra 0.5 percentage point tax was added to employer payroll tax contributions. As healthcare costs increase, an increase in SR participation and decrease in CR participation imply that subsidies to SR members cannot be raised without higher taxes (Chernichovsky et al., p. 32).

Conclusion

Solving the inefficiencies present in Colombia's universal healthcare system will require an influx of funding. In 2011, universal healthcare cost Colombia 6.1 percent of its GDP (World Bank, 2013). However, other countries with universal healthcare regimes spend on average much more of their GDP on healthcare. For instance, the United Kingdom, Germany, Canada, and France together spend an average of 10.8 percent of their GDP on healthcare (World Bank, 2013). Each of these countries differs in its funding models, but each strives to achieve universal coverage. Thus, in order to improve the overall efficiency of Colombia's universal healthcare system, Colombia must increase the level of funding for universal healthcare to a level that approaches healthcare expenditures in those countries with successful universal healthcare systems.

While the population coverage under the SR more than doubled from 2002 to 2009, gross healthcare expenditure as a percentage of GDP increased by only 25 percent (Joint Learning Network . . .). Although a large increase in healthcare spending is necessary, Colombia had a 2.9 percentage budget deficit in 2011 (Jaramillo and Schmidt, 2012). In order to cover the aggregate needs of the SR population as well as improve the quality of care under the SR to approach the level of care offered under the CR, healthcare funding must be increased by a few percentage points of Colombia's GDP, perhaps making Colombia's total healthcare expenditures around 9 percent of its GDP. A moderate increase in healthcare spending is a feasible goal and should ideally be achieved over a manageable horizon, approximately ten years. Raising the level of healthcare spending will help eliminate the legal, organizational, selection, and financial inefficiencies that currently exist in Colombia's universal healthcare system.

Increased funding to the healthcare budget would allow a higher benefit package value to be provided to SR patients as well as a higher quality of care, thereby likely lessening the frequency of tutelas. More funding to the healthcare budget would also help solve public hospitals' financial problems arising from demand-side healthcare. Allocating funds to public hospitals would help public hospitals institute new administrative, accounting, marketing, and billing procedures, allowing them to become more efficient and handle a higher volume of patients. Public hospitals would thus be better equipped to compete with private hospitals under the managed-competition model. Additionally, with more funding, it is also less likely that municipalities would need to compete with each other for a relatively small funding budget. By lowering the incentives to manipulate SISBEN eligibility data, increased healthcare funding has the potential to solve selection process inefficiencies under the current system. Lastly, with increased funding, participation rates under the SR and CR become less important. As long as there is adequate funding, increased participation in the SR would simply signal that the universal healthcare program is becoming more successful.

Although inefficiencies exist under the universal healthcare system, Colombia is making great strides in ensuring equity for its citizens under Law 100. The one-time, comprehensive approach of implementing universal healthcare drastically increased healthcare coverage rates and provided financial protection to those enrolled in the SR. The success of Colombia's healthcare system is dependent on Colombia's ability to efficiently allocate resources to its population and, ultimately, to increase funding to the universal healthcare system.

REFERENCES

Abadia, Cesar Ernesto, and Diana G. Oviedo. "Bureaucratic Itineraries in Colombia: A Theoretical and Methodological Tool to Assess Managed-Care Healthcare Systems." *Social Science and Medicine*. Vol. 68, 2009, pp. 1153–60.

Arbelaez, Maria Patricia, Marta Beatriz Gavaria, Alvaro Franco, Roman Restepo, Doracelly Hinacapié, and Erik Blas. "Tuberculosis Control and Managed Competition in Colombia." *International Journal of Health Planning and Management*. Vol. 19, Suppl. 1, 2004, pp. S25–43.

Barrero, Cesar-Abadia. "The Colombian Healthcare Reform: A 'Living Laboratory' of Global Capitalism?" Society for Medical Anthropology. March 29, 2012, pp. 1–4.

Bernal, Oscar, Juan Camilo Forero, and Ian Forde. "Colombia's Response to Healthcare Crisis." *BMJ*. Vol. 344, 2012, pp. 1–5.

Branco Araújo, Gabriela Tannus Branco, Joaquín E. Caporale, Stephen Stefani, Diana Pinto, and Antonio Caso. "Is Equity of Access to Health Care Achievable in Latin America?" *Value in Health*. Vol. 14, 2011, pp. S8–12. www.ispor.org/consortiums/LatinAmerica/documents/ViH/Is-Equity-of-Access-to-Health-Care.pdf. Accessed January 2013.

Calderón, Carlos Alberto Agudelo, Jamie Cardona Botero, Jesús Ortega Bolaños, and Rocio Robledo Martinez. "The Colombian Healthcare System: 20 Years of Achievements and Problems." Instituto de Salud Pública, Universidad Nacional de Colombia. 2011, pp. 2817–28. www.scielo.br/pdf/csc/v16n6/20.pdf. Accessed March 2013.

Castañeda, Tarsicio. "Targeting Social Spending to The Poor with Proxy–Means Testing: Colombia's SISBEN System." Social Protection Discussion Paper Series. No. 0529. World Bank, June 2005, pp. 1–22.

Chernichovsky, Dov, Ramiro Guerrero, and Gabriel Martinez. "The Incomplete Symphony: The Reform of Colombia's Healthcare System." Documentos PROESA #1. Centro de Estudios en Protección Social y Economía de la Salud. May 2012, pp. 3–58.

Clavijo, Sergio, and Camila Torrente. "The Health-Care System and Its Fiscal Impact in Colombia." papers.ssrn.com/sol3/papers.cfm?abstract_id=1997229. pp. 533–51.

Colombia Reports. "Universal Healthcare for Colombians by 2012: Santos." August 12, 2011. colombiareports.com/colombia-news/news/18297-universal-healthcare-for-colombians-by-2012-santos.html. Accessed August 2012.

Conferencia Interamericana de Seguridad Social. "2006–2010 Health Reforms in the Americas." *CISS Health Systems and Insurance Report*. March 2011, pp. 1–22.

El Congreso de la República de Colombia. Ley 100 de 1993 [Law 100]. 1993. www.caprecom.gov.co/sitio/filesnormatividad/Ley-100-de-1993.pdf. Accessed September 2012.

Gaviria, Alejandro, Carlos Medina, and Carolina Mejia. "Assessing Health Reform in Colombia: From Theory to Practice." *Economía*. Vol. 7, No. 1, pp. 29–72. muse.jhu.edu/journals/economia/v007/7.1gaviria.html. Accessed September 2012.

Giedion, Ursula, and Manuela Villar Uribe. "Colombia's Universal Health Insurance System." *Health Affairs*. Vol. 28, No. 3, pp. 853–63.

Glassman, Amanda L., Maria-Luisa Escobar, Antonio Giuffrida, and Ursula Giedon, eds. "From Few to Many: Ten Years of Health Insurance Expansion in Colombia." Inter-American Development Bank. 2009. www.iadb.org/en/publications/publicationdetail,7101.html?id=67584%20&dcLanguage=en&dcType=All. Accessed April 2013.

González, Ana Christina, and Juanita Durán. "Impact of Court Rulings on Health Care Coverage: The Case of HIV/AIDS in Colombia." *MEDICC Review*. Vol. 13, No. 3, p. 54. www.medicc.org/mediccreview/articles/mr_212.pdf. Accessed May 2013.

Jaramillo, Andrea, and Blake Schmidt. "Colombia Government Budget Deficit Was 2.9% of GDP in 2011." Bloomberg. February 1, 2012. www.bloomberg.com/news/2012-02-01/colombia-government-budget-deficit-was-2-9-of-gdp-in-2011-1-.html. Accessed May 2013.

Joint Learning Network for Universal Healthcare Coverage. "Colombia: General System of Social Security in Health." 2013. jointlearningnetwork.org/content/general-system-social-security-health. Accessed May 2013.

Mance, Henry. "Waiting Game for Colombia's Informal Workers." BBC News. January 19, 2010. news.bbc.co.uk/2/hi/business/8458019.stm. Accessed February 2013.

Miller, Grant, Diana Pinto, and Marcos Vera-Hernández. "High-Powered Incentives in Developing Country Health Insurance: Evidence from Colombia's '*Régimen Subsiado*'." National Bureau of Economic Research. Working Paper No. 15456, October 2009, pp. 1–31.

Pinto D., and W.C. Hsiao. "Colombia: Social Health Insurance with Managed Competition to Improve Health Care Delivery," in *Social Health Insurance for Developing Nations*. W.C. Hsiao and R.P. Shaw, eds. Washington, D.C.: IBRD/World Bank, 2007, pp. 105–31.

Plaza, Beatriz, Ana Barona, and Norman Hearst. "Managed Competition for the Poor or Poorly Managed Competition? Lessons from the Colombian Health Reform Experience." *Health Policy and Planning*. Vol. 16, Suppl. 2, 2001, pp. 44–51.

Trading Economics. "Life Expectancy at Birth; Total (Years) in Colombia." 2012. www.tradingeconomics.com/colombia/life-expectancy-at-birth-total-years-wb-data.html. Accessed February 2013.

Trujillo, Antonio J., Jorge E. Portillo, and John A. Vernon. "The Impact of Subsidized Health Insurance for the Poor: Evaluating the Colombian Experience Using Propensity Score Matching." *International Journal of Health Care Finance and Economics*. Vol. 5, No. 3, 2005, pp. 211–39.

Tsai, Thomas C. "Second Chance for Health Reform in Colombia." *The Lancet*. Vol. 375, Issue 9709, pp. 109–10. www.thelancet.com/journals/lancet/article/PIIS0140-6736(10)60033-5/fulltext. Accessed September 2012.

Vélez, Carlos Eduardo, Elkin Castaño, and Ruthanne Deutsch. "An Economic Interpretation of Colombia's SISBEN: A Composite Welfare Index Derived from the Optional Scaling Algorithm." Inter-American Development Bank. November 1998.

Webster, Paul Christopher. "Health in Colombia: A System in Crisis." *Canadian Medical Association Journal*. Vol. 184, 2012, pp. E289–90.

World Bank. "Health Expenditure, Total (% of GDP)." 2013. data.worldbank.org/indicator/SH.XPD.TOTL.ZS. Accessed May 2013.

World Bank. "Reaching the Poor with Health Services—Colombia." 2007. siteresources.worldbank.org/INTPAH/Resources/Reaching-the-Poor/RPPBriefsColombiaREV.pdf. Accessed October 2012.