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Dominican Republic: Implementing a health protection system that leaves no one behind



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UNIVERSAL HEALTH COVERAGE STUDY SERIES No. 30

Dominican Republic:

Implementing a health protection system that leaves no one behind

Magdalena Rathe

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ABBREVIATIONS AND ACRONYMS

ARS	Health Risk Administrators, Administradores de Riesgos de Salud
CNSS	National Social Security Council, Consejo Nacional de Seguridad
ENDESA	Demographic and Health Survey, Encuesta Nacional Demográfica y de
	Salud
ENFT	Labor Force Survey, Encuesta Nacional de Fuerza de Trabajo
GDP	gross domestic product
IDSS	Dominican Institute of Social Security, Instituto Dominicano de Seguros
	Sociales
LAC	Latin American and Caribbean Countries
MSP	Ministry of Health, Ministerio de Salud Pública
PBS	Basic Health Plan, Plan Básico de Salud
PDSS	Health Services Plan, Plan de Servicios de Salud
RC	Contributory Regime, Regimen Contributivo
RCS	Contributory-Subsidized Regime, Regimen Contributivo-Subsidiado
RS	Subsidized Regime, Régimen Subsidiado
SENASA	National Health Insurance, Seguro Nacional de Salud
SFS	Family Health Insurance, Seguro Familiar de Salud
SIGEF	Integrated System of Financial Management, Sistema Integrado de
	Gestión Financiera
SIMON	National Information and Monitoring System, Sistema Nacional de
	Información y Monitoreo
SISALRIL	Superintendence of Health and Occupational Risks, Superintendencia de
	Salud y Riesgos Laborares
SIUBEN	Unique System of Beneficiaries of Social Subsidies, Sistema Único de
	Beneficiarios
SNS	National Health Service, Servicio Nacional de Salud
SRS	Regional Health Services, Servicios Regionales de Salud
UNAP	Primary Care Unit, Unidad de Atención Primaria
WDI	World Development Indicators

Preface to the second round of the Universal Health Coverage Study Series

All over the world countries are implementing pro-poor reforms to advance universal health coverage. The widespread trend to expand coverage resulted in the inclusion of the "achieving universal health coverage by 2030" target in the Sustainable Development Agenda. Progress is monitored through indicators measuring gains in financial risk protection and in access to quality essential health-care services.

The Universal Health Coverage (UHC) Studies Series was launched in 2013 with the objective of sharing knowledge regarding pro-poor reforms advancing UHC in developing countries. The series is aimed at policy-makers and UHC reform implementers in low- and middle-income countries. The Series recognizes that there are many policy paths to achieve UHC and therefore does not endorse a specific path or model.

The Series consists of country case studies and technical papers. The case studies employ a standardized approach aimed at understanding the tools –policies, instruments and institutions- used to expand health coverage across three dimensions: population, health services and affordability. The approach relies on a protocol involving around 300 questions structured to provide a detailed understanding of how countries are implementing UHC reforms in the following areas:

- **Progressive Universalism**: expanding population coverage while ensuring that the poor and vulnerable are not left behind;
- **Strategic Purchasing**: expanding the statutory benefits package and developing incentives for its effective delivery by health-care providers;
- **Raising revenues** to finance health care in fiscally sustainable ways;
- Improving the availability and quality of health-care providers; and,
- **Strengthening accountability** to ensure the fulfillment of promises made between citizens, governments and health institutions.

By 2017, the Series had published 24 country case studies and conducted a systematic literature review on the impact of UHC reforms. In 2018 the Series will publish an additional15 case studies, A book analyzing and comparing the initial 24 country case studies is also available: *Going Universal: How 24 Developing Countries are Implementing UHC Reforms from the Bottom Up*. Links to the Series and the book are included below.

Daniel Cotlear, D. Phil. Manager and Editor Universal Health Coverage Study Series

Links:

http://www.worldbank.org/en/topic/health/publication/universal-health-coverage-study-series

http://www.worldbank.org/en/topic/universalhealthcoverage/publication/goinguniversal-how-24-countries-are-implementing-universal-health-coverage-reforms-frombottom-up

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About the Author

Magdalena Rathe is a health economist and co-founder and Executive Director of the Plenitud Foundation (Fundación Plenitud), which works to strengthen health systems and to achieve a more equitable and sustainable world; and coordinator of the Observatory of the Health System of the Dominican Republic (Observatorio del Sistema de Salud de la Republica Dominicana) and the Americas Network on Health Accounts. She is an expert in health systems research and financing policies, health accounts, and financial protection, with a main interest in improving the health system performance. Magdalena also collaborates with the update of the Global Expenditure Database of the World Health Organization (WHO) for the Latin America and the Caribbean countries that is published annually in the World Health Statistics by WHO, and the World Development Indicators by the World Bank, and collaborated with the Harvard Global Initiative for Equity. Magdalena has published several books and has written numerous articles and book chapters. She has been a consultant for various international agencies such as WHO, the Pan-American Health Organization, the Inter-American Development Bank, and the World Bank, as well as universities such as the Harvard School of Public Health and George Washington University. She has held important positions in the Dominican government, including on the Monetary Board of the Dominican Republic.

Executive Summary

During the last 50 years, the Dominican Republic has experienced important economic growth, with rates higher than most Latin American countries. However, despite the substantial reduction in poverty and indigence in recent years, average wages within the formal sector remain extremely low, and a large proportion of the working-age population is outside the formal sector. The country introduced a structural health reform in 2001, which has been successful in affiliating 70 percent of the population to the Family Health Insurance, with a complete package of services with the same content for all, although with different forms of financing and provision of services. However, the public service network, which is legally in charge of providing care to the lower-income population, lagged in its restructuring process, with serious problems of quality, efficiency, and governance. Thus, although many of the coverage goals have been achieved, population health outcome indicators remain well behind most countries in the Latin America region.

In 2016, the Dominican government began to take steps to deepen the health reform, with the goal of affiliating 90 percent of the population by 2020. The function separation process mandated by the 2001 law has finally been implemented, with the unification of the public providers' network under a new entity, separate from the Ministry of Health. There are discussions to modify the reform law in order to implement the mandate of an effective development of the first level of care and its establishment as a gateway to the health system. The affiliation expansion will require possibly expanding the definition of poverty, increasing public financing, improving the documentation process, promoting formalization of small enterprises, and identifying high-income independent professionals to be incorporated into the system.

Another key aspect of the pending agenda to achieve greater health and financial protection within social insurance is the in-depth revision of the Basic Health Plan (*Plan Básico de Salud*). This revision's objective would be built on guaranteed coverage of certain health conditions considered to be priorities, including the restructuring of the health care model to introduce rationality, control costs, reduce or eliminate funding differences between the Contributory Regime (*Regimen Contributivo*) and Subsidized Regime (*Régimen Subsidiado*), and increase public funding for the Subsidized Regime. It is necessary to ensure that the benefits provided in the Basic Health Plan are delivered; that is, that the services required by the population are effectively covered, which will also reduce out-of-pocket spending. It is necessary to monitor the financial situation of all entities of the health system and to continue strengthening institutional capacity to carry out the financial and technical audits of health providers. The permanent monitoring of the financial sustainability of the Family Health Insurance Subsidized Regime and the Basic Health Plan is fundamental, while a systematic analysis of the fiscal space is carried out.

Today, 16 years after the health sector reform began in the Dominican Republic, steps are finally being taken that could lead to the achievement of true health coverage, on the way to universal coverage. It is essential to closely monitor implementation of these key decisions and the allocation of funds that accompany them, concomitantly with the monitoring of the indicators of quality of expenditure, quality of services, and health outcomes of the population.

1. Introduction

The Dominican Republic is an upper-middle-income country in the Caribbean region, sharing the island of Hispaniola with Haiti. During the last 50 years, the country has experienced important economic growth, with rates higher than most Latin American countries. Between 1996 and 2014, its average annual growth of real gross domestic product (GDP) was 5.6 percent, and its per capita income increased from US\$2,200 in 1996 to US\$6,832 in 2015 (World Development Indicators, 1996–2015).

However, despite a substantial reduction in poverty and indigence in recent years, average wages within the formal sector remain extremely low, and a large proportion of the working-age population (about 46 percent) are outside the formal sector.¹ In addition, the country's social indicators—including life expectancy and other health indicators—improved in a proportion similar to other countries that did not experience a similar macroeconomic boom. Despite high health service coverage rates, the Dominican Republic tends to lag behind other Latin American and Caribbean countries in terms of several health system indicators (table 1).

The Dominican Republic's health system performance could be partly explained by the low budget allocated by the government to social sectors and, particularly, to the public health system. This budget averaged 1.7 percent of GDP from 1995 to 2006, prior to implementation of the Contributory Regime (*Regimen Contributivo, RC*) that was established as part of the health reform that was approved in 2001. Social security funding, which is part of the public financing, accounted, on average, for only 0.5 percent of GDP from 1995 to 2009.

For many decades, the health system in the Dominican Republic was similar to many Latin American countries. That is, it was an open system, financed with general taxes, which theoretically covered the health needs of the population who used services in hospitals and other health centers. Social insurance, similar in its organization to several countries in the region, was vertically integrated, owned its own establishments, and protected employees but not their families. Due to the salary caps that existed in Dominican pesos in the legislation to access social insurance, together with the gradual process of devaluation, social insurance began to lose importance in both affiliation and financing (Rathe 2010).

The low budget assigned by the government to the public health system, which was reflected in deficient management and quality of services, contributed to the growth of a private provider and insurer sector that not only served the richer population, but also became the preferred option for seeking services. Dominican firms began to offer private prepaid plans to their employees. Even low-income groups, who did not have insurance protection, opted for private prepaid plans. Private prepaid plans, with no regulation and many exclusions, affiliated twice as many people as the social insurance. Private insurance expenditures accounted for an average of 0.6 percent of GDP from 1995 to 2009, compared to 0.5 percent of GDP in the case of social security during the same period. Out-of-pocket spending was the main source of funding for the health system, accounting for 2.8 percent of GDP in 1995, which at the time was twice as much as public/government expenditures (Rathe and Moliné 2011).

In 2001, the government approved a structural reform of the Dominican health system that aimed to achieve equity and universality, expressed in the definition of a single package of benefits for the entire population, which would be delivered by both public and private providers. The health reform established that the poor would be subsidized through per capita payments from general taxes, which would be transferred to a common fund, creating the Subsidized Regime (*Régimen Subsidiado, RS*) of Family Health Insurance. The RS was created to protect the poor, who would seek their health care in the public providers' network administered by the Ministry of Public Health (*Ministerio de Salud Pública, MSP*).²

Table 1: Selected Indicators Measuring the Health System's Performance in theDominican Republic Compared to 19 Latin American Countries, circa 2015

KEY INDICATORS	LEVEL	REGIONAL AVERAGE	POSITION IN LA	INDICATOR DEFINITION
HEALTH OUTCOMES				
Life expectancy, 2014	73	75	15	Life years at birth
Infant mortality, 2015	26	14	17	1,000 live births
Perinatal mortality, 2015	22	10	19	1,000 live births
Maternal mortality, 2015	92	77	14	100,000 live births
Anemia women aged 15-49	26	20	17	Women aged 15-49
Teenage pregnancy, 2013	98	71	17	1,000 women aged 15-49
ACCESS AND COVERAGE				
Ante natal coverage, 2013	95	85	2	At least four visits
Deliveries by qualified personnel	99	93	7	Deliveries in hospitals with doctors
Women using contraconceptives, 2013	68	66	10	Women aged 15-49
Vaccinated with DP3, 2014	91	89	9	% of children
RESOURCES				
Doctors, 2013	2.1	2.1	4	Doctors per 1,000 inhabitants
Nurses, 2013	0.38	1.6	16	Nurses per 1,000 inhabitants
Hospital beds, 2012	1.7	1.8	7	Beds per 1,000 inhabitants
HEALTH EXPENDITURES AND FINAN	CING			•
Total health expenditures as % GDP, 2014	5.7	8	16	Public and private expenditures
Public health expenditure % of THE	48	58	16	Public expenditure including SHI
OOPS as % of THE	49	35	6	Average 2008–13
Catastrophic health expenditures, 2004	9.8	_	—	Health exp more than 30% of available income
Catastrophic health expenditures, 2007	7% urban	—	—	Health exp more than 30% of available income
	10% rural	—	_	Health exp more than 30% of available income
FACTORS OUTSIDE THE HEALTH SYS	TEM			
GDP per capita PPP, 2013	11,930	12,623	10	US\$ PPP prices of 2011
Real growth GDP, 1996–2014	5.6	3.7	1	
Income inequality, 2013	47	48	5	Lower GINI coefficient
Women education, 2013	8	8	11	School years, women aged +25
Access to water	85	93	19	% population – enhanced water sources
Basic sanitary coverage	83	82	10	% population – enhanced sanitation sources
Human Development Index	102		13	UNDP definition
Gender Inequality Index	0.5	0.4	17	UNDP definition
Sources: Rathe and Suero 2017; INT	EC/Plenitud 2	2017.		
<i>Note: —= not available</i>				

As will be explained in the next section, the Dominican health reform was successful in the affiliation of the population, the separation of functions in the health system, the institutionalization of the mechanisms to collect and distribute funding among different actors, the definition of a comprehensive health benefits package, and the financial protection of the formal sector population.

However, most of the difficult decisions regarding the restructuring of the public provider network were not taken, which affected the efficiency and quality of the services received by the poor, who were covered by the RS, and by the uninsured. These unresolved decisions have resulted in overall health outcomes that have not improved at the same rate as the increase in health service coverage.

2. Organization and Financing of the Health System

In 2001, a health reform law was approved to address most of the issues that plagued the Dominican health system. These issues included inequities, lack of financial protection, high out-of-pocket payments, high utilization of private providers even by the poor population paying out of pocket, lack of accountability of doctors at public facilities, governability issues, and problems of quality and efficiency (CNS 1996).

Prior to the reform, from 1996 to 2001, the country was involved in health reform discussions. Finally, after a new government took office in 2000, Congress approved health reform Law 87-01 in 2001. This law, together with other laws such as Health Law 42-01,³ created an entirely new institutional framework to exercise the functions of stewardship, financing, insurance, and provision of services. Family Health Insurance (*Seguro Familiar de Salud, SFS*) was established, with the goal of universality. Thus, its mandate was to offer protection to the entire population, with the same Basic Health Plan (*Plan Básico de Salud, PBS*) of preventive and curative services, eliminating all exclusions.

The SFS would be financed by different sources. Formal sector employees, within the RC, would be financed by salary-based contributions by employee and employer; while the unemployed, disabled, or population with incomes below the minimum wage, would be financed by the government from general taxes, under the RS. The informal sector with low salaries above the minimum, would voluntarily contribute under the Contributory-Subsidized Regime (*Regimen Contributivo-Subsidiado*), with partial government subsidies. All resources would go into a single fund, the Social Security Treasury (*Tesorería de Seguridad Social*), which would transfer per capita payments to the Health Risk Administrators (*Administradores de Riesgos de Salud*), entities that would oversee insurance and risk management, as well as contracting of the health providers (see figure 1).





The reform proposed the following vision of the new health system: universal coverage with equity of the same PBS, a compulsory public financing system, government stewardship and supervision, and a network of public and private providers and insurers operating in a context of regulated competition for the formal sector employees. However, the law introduced the mandate by which the subsidized population could access the services only in the public network, then operated by the MSP. A public risk administrator, the National Health Insurance (*Seguro Nacional de Salud, SENASA*), created for this purpose, took charge of managing the RS and contracting the public providers.

To achieve the proposed goals, deep structural transformations were required to accomplish the separation of functions and the operability of the public system of provision, and consequently a 10-year transition period (until 2011) was proposed, which lasted longer than expected. The SR began to operate very gradually in certain regions of the country in 2002, as the financial and management procedures began to be introduced in the public network, which at the time did not have the capacity to execute contracts to meet the demand for health services. The difficulty of implementing these processes and a certain lack of political will on the part of the authorities to confront governance issues in the sector (such as lack of compliance of health services from advancing as envisioned.

It was not until the end of 2007 that real extension of population coverage began. For years, power struggles in relation to the PBS among the main institutional actors prevented the RC from starting, until finally a presidential decree mandated it to begin in September 2007. This resulted in the reduction of PBS benefits and the inclusion of important copayments, as well as coverage financial ceilings. From that point on, the PBS was called the Health Services Plan (*Plan de Servicios de Salud, PDSS*) (Cañon, Rathe,

and Giedeon 2014). At the same time, more funds were allocated to the RS and, since 2008, affiliation in both the RS and RC began to increase steadily, reaching almost 70 percent of the population in 2016 (Rathe and Suero 2017).



Figure 2: Insurance coverage by quintile group (2008 and 2014)

The proportion of people with health insurance in the first income quintile was only 6.5 percent in 2002. Figure 2 shows that it increased to 25 percent in 2008 and then rose to 60 percent in 2014 (ENDESA 2002; ENFT 2008, 2014). According to affiliation data of the system, it rose to more than 90 percent for 2016.⁴

The total affiliation of the SFS rose from 65,000 people in 2004 to 6.9 million in 2016, almost half of which (3.3 million) correspond to the RS, covering practically all the people considered poor according to official statistics, leaving out only those who do not have identification documents. Likewise, the resources allocated to the SRS to cover the lower-income groups went from RD\$2,633 million in 2008 to RD\$4,449 million in 2015, at constant 2010 prices, implying an annual growth of 9 percent in real terms, almost doubling the annual growth rate of GDP in the same period.



Figure 3: Financial burden of health expenditures, 2007

In 2007—before the affiliation expansion of the SFS, the financial burden of health expenditure (measured as the percentage of health expenditure on total household consumption minus food expenditures) affected all income groups (figure 3).

In addition, eight percent of Dominican households had catastrophic health expenditures—more than 30 percent of their income minus food consumption—with a larger percentage of uninsured households and rural households (Rojas 2009).⁵

There are no recent figures to estimate catastrophic health expenditures. However, the 2013 Demographic and Health Survey (*Encuesta Nacional Demográfica y de Salud, ENDESA*) shows that there is not a huge concentration in the upper-income quintile, as is the case in many countries. The richest quintile has an average health expenditure that is a little more than three times the lowest one. The distribution of expenditures by type is similar across quintiles, with pharmaceuticals representing around 46 percent on average, affecting more the poor population (48 percent of health expenditures of the first income quintile and 40 percent of health expenditures of the fifth income quintile.⁶

By 2016, there were still three million people without health coverage, an important part of whom were probably almost poor or vulnerable, but who did not meet the official poverty criteria to qualify for social benefits. A small proportion of these were undocumented persons (Dominicans and migrants), but the majority were informal sector workers. There is a great deal of informality in the Dominican labor market, estimated as 47 percent of the working-age population (ENFT, Central Bank 2016). The RCS, designed in the 2001 law to cover them, was never implemented due to the difficulties of affiliating the informal sector. There is currently a proposal to eliminate this regime and develop initiatives to cover this remaining population, as will be explained later.



Figure 4: Percentage of Population Insured and Uninsured, 2015

Source: Author based on SISALRIL and ENFT

As figure 4 shows, almost 70 percent of the population is insured by the SFS (Social Health Insurance), half in each of the existing financing regimes. Of the remaining uninsured segment of the population, approximately 53 percent have some contributory capacity and should be included in the RC, requiring a significant effort of identification from the tax authorities of small business and independent professionals and verification of their incomes. The rest of the uninsured population is composed, most likely, of low-income informal sector workers who would need to be covered with government subsidies, and undocumented persons.

Trends in health expenditures since implementation of the RC (2008 was the first year in which the impact of the reform can be observed) show an increase in public financing to the health system, but it is neither enough to change the overall financing structure nor to significantly reduce out-of-pocket payments. Total health expenditure during 2008 (when the impact of health reform can be observed) averaged 5.5 percent of GDP. Resources financed through mandatory schemes (that is, general taxes and social security contributions) rose from 1.8 percent of GDP in 2008 to 2.9 percent in 2015.

Central government financing, mostly to address the health needs of the low-income population, represented 62 percent of total public funds in 2008, and 55 percent in 2015.



Figure 5: Evolution of supply side and demand side financing in the Subsidized Regime, 2008 and 2015

Supply-side financing continued to be the major source of financing for the poor (86 percent in 2008, and 73 percent in 2015). However, demand-side financing (funding assigned by SENASA through the RS) increased substantially in the period, from 14 percent in 2008 to 27 percent in 2015. (Figure 5). The proportion of supply-side financing is probably higher, since these figures include only the MSP funding to its centralized network of providers. There are other funds assigned via supply side that were not included, such as self-managed hospitals, private not-for-profit hospitals, drugs, and others.

Funding of the RC increased from 33 percent of total public financing to 42 percent in 2015, a real average annual growth of 11 percent, almost three times the average annual GDP growth during the same period. This contributed to the increase in total health per capita expenditure, which rose from US\$506 per capita in 2008 to US\$814 in 2014 (in purchasing power parity). Per capita public spending on health also increased significantly in the Dominican Republic, although it is still relatively low compared to other countries in the Latin American region (Rathe and Suero 2017).

This increase in public funds has not been enough to significantly change the financing structure of the health system. Although the share of private spending has decreased since the reform, it remains high. While compulsory social security financing increased, spending on private insurance also increased; although it has maintained its share of total health expenditures (9 percent), as the reform law gave way to the creation of complementary plans by the Health Risk Administrators. Likewise, household out-of-pocket spending still represents a large portion of the financing of the Dominican health system, at around 41 percent of current health services, who did not when they had no insurance, and who are now paying out-of-pocket for drugs, tests, and procedures not covered, or to pay for copayments. There is no evidence to support this explanation, but

the situation suggests that the health reform's equity and financial protection goals are not yet being met.

The RS has been successful in affiliating the poor, practically having covered the population enrolled in the Unique System of Beneficiaries of Social Subsidies (*Sistema Unico de Beneficiarios, SIUBEN*), the entity that is part of the Social Cabinet chaired by the Vice-Presidency of the Republic. The SIUBEN oversees the identification of poor people who are eligible to receive different types of government subsidies, such as conditional transfers.





However, as shown in figure 6, although there was a real increase in total allocated funds, per capita funding decreased between 2011 and 2014 and slightly increased again in 2015. This figure does not include the supply-side funding that finances the public network, because it provides services not only to the insured population but also to everyone who seeks them. In the case of the RC, the figure also shows stagnation in terms of real per capita spending for the affiliated population.

Importantly, although the collection of revenues is centralized, the accounting for each regime is separate—that is, they are not pooled together—thereby reducing the solidarity of the system and the possibilities of risk distribution among the entire population. In addition, an evaluation estimated that 7.9 percent of the beneficiary households of social subsidies affiliated to the SR had catastrophic expenses above 30 percent of their income (minus food consumption). However, this figure is less than 10.4 percent of the non-beneficiary households that were included in the survey for comparison purposes, implying that the program offered protection to its beneficiaries (Rathe and Rojas 2012).

3. Provision of Public Health Services and Priorities

The provision of health services is carried out in the Dominican Republic through a multiplicity of providers, both public and private. It is estimated that there are more than 5,933 health facilities of different levels of care, of which 74 percent are private and 26 percent are public (Ortiz 2017). There are 12 public reference hospitals and 7 self-managed public hospitals plus an important group of private hospitals. There are more than 1,700 public primary care facilities. A public attention model has been approved and is in a piloting process, based on implementation of a primary care strategy with a geographically assigned population to the first level of care units and the organization of services within a network of different levels of care (MSP 2012).

Most of the health services used by the population are provided in the public system: 59 percent of outpatient consultations and 51 percent of inpatient services in 2013. However, there is still significant utilization of private services, that is, 21 percent of the first income quintile members for outpatient consultations, compared to 38 percent in 1996, before the reform. Also, the use of services in the private sector is proportional to income, although a relatively high proportion of people in the upper quintile also use public services (ENDESA 2013).

Most public providers do not have service contracts with the private Health Risk Administrators, so if they provide care to the insured population, these public establishments do not receive the corresponding payments. The probable reason that insured persons covered by the RC still use public services might be that the PDSS includes copayments while the RS does not. In addition, although there are no studies to support this, it has been reported that a significant proportion of private providers charge additional fees—that is, fees that exceed those authorized by the Superintendence of Health and Occupational Risks (*Superintendencia de Salud y Riesgos Laborares, SISALRIL*).

The health reform of 2001 states that the provision of services may be public or private and that insurers (Health Risk Administrators) could contract both, subject to existing regulations and available public financing. In the case of the population affiliated with the RS, it limits the use of services to the public network—except in those cases in which the services are not available. In addition, the legislation states that the gateway to the health system would be the first level of care. However, in practice, the first level of care as a gateway does not work properly. In the case of the public network, there is limited utilization of primary care centers, and specialized hospitals tend to be congested with patients; private patients tend to seek care directly from specialists.

The above situation reflects one of the main problems of the health system in the Dominican Republic: the health reform has been successful in many ways, particularly in terms of the affiliation of the population and the organization of financing. However, the provision of services especially in primary care—particularly those that serve the poor population—has been left behind. A significant proportion of primary health care units lack adequate staffing, equipment, and management capacities (see paragraph below for more information). Moreover, interns ("*pasantes*") who are recently graduated doctors are traditionally assigned to handle these first-level facilities for one year to obtain their accreditation to practice in the medical profession. These personnel are temporary and have little experience. Yet the country has family doctors who are unemployed.

Law 87-01 states that all Social Security Health Service Providers must be qualified in a process called "habilitation", by which the providers (both the public and private sector providers) must comply with certain rules in terms of infrastructure, equipment, human resources, certifications, and others, which make them capable of providing health services. This process, which is the responsibility of the MSP, has been partial and slow for a long time. However, it seems the government is now giving it priority. Around 53 percent of existing public and private health facilities are fully qualified. There are around 1,700 primary care public units, of which about 60 percent have been qualified to provide health services (Ortiz 2017).

An important aspect of the poor quality of primary care is the usually low government financing of first-level care. In fact, from 2012 to 2015, the average budget for first-level care in the MSP was less than 0.1 percent of the funding for the provision of personal services. There seems to be a problem of classification that appears to have been corrected for 2017 budget; however, the funding for the new National Health Service (*Servicio Nacional de Salud, SNS*) for primary care is only 3 percent of the budget, while 80 percent is assigned for specialized services (including centralized and self-managed hospitals), plus 17 percent for administration.

In addition, there is no enforcement of using first-level facilities as the first contact before being referred to more specialized care and, even more important, these facilities have limited capacity to respond to their target population's health needs. There are proposals to make this level operational, which include geographically assigning or registering population to primary care units. At present, with external funding, a payment-forperformance system for primary health care is being implemented in certain parts of the country, which seems to have had good results. However, the government would need to assign the corresponding funding once the externally financed projects are finished to sustain the pay-for-performance system.

The most important issue in this connection is the very low per capita payments SENASA allocates to public providers for primary care. In 2014, approximately 86 percent of SENASA's expenditure within the RS was spent on hospitals, with specialized hospitals accounting for the largest funding share (table 2). Twenty-two percent of the cost of the RS was spent on private specialized hospitals (mostly non-for-profit hospitals) —possibly because the procedures were not offered by public hospitals (Rathe and Hernández 2015). This situation is even more pronounced in the RC, where specialized care and highly complex services accounted for the largest spending shares.

In summary, it can be said that the bulk of the resources of the whole system has been dedicated to specialized care and care provided in third-level hospitals. In addition to the SENASA funds for the RS, the financial flows that are channeled through the supply side—the MSP budgets for its own providers—also prioritize specialized third-level care. This has not been an intentional policy. It is mainly the result of not enforcing primary care as a gatekeeper and of delaying the restructuring of the public providers' network. And it is a worrisome situation, because as the population ages, the prevalence of more expensive chronic conditions will inevitably increase, posing sustainability threats to the system.

Descripción	Inpatient curative care	Outpatient curative care	Servicios Auxiliares	Bienes Médicos	TOTAL			
						%		
Total	1,247.1	1,114.9	757.8	138.4	3,258.4	100.0%		
General Public Hospitals	241.6	-	28.6	-	270.2	8.3%		
Specialized Public Hospitals	934.0	601.7	256.3	-	1,792.0	55.0%		
Specialized Private Hospitals	71.5	405.6	261.3	-	738.4	22.7%		
Ambulatory care providers	-	107.3	33.0	-	140.6	4.3%		
Laboratories	-	-	2.1	-	2.1	0.1%		
Image centers	-	0.2	176.5	-	176.7	5.4%		
Pharmacies	-	-	-	138.4	138.4	4.2%		
	38%	34%	23%	4%	100%			
Source: Rathe and Hernandez, 2015.								

Table 2: Distribution of SENASA payments to providers, by function and providertype (2014)

The first level of care as a gateway to the health system and as the resolution level of most of the problems that afflict the population is a key strategy included in the National Development Strategy 2030 (Law 1-12) and the Multiyear Sector Public Investment Plan 2013–2016. It is also a fundamental part of the model of care promoted by health and social security laws. However, it has not been implemented and, as mentioned, it is underfinanced.

Preventive and health promotion services, as well as community health services, which are included in the MSP's budget are also underfinanced. In 2014, they represented 1.5 percent of the current national health expenditure and 4.5 percent of the total resources managed by the MSP to carry out epidemiological surveillance and all public health programs (Rathe and Hernández 2015).

However, there have been recent measures to restructure public provision of health services, including the creation of the National Health Services (*Servicio Nacional de Salud*/SNS), through Law 123/15. This entity coordinates the Regional Health Services (*Servicios Regionales de Salud*/SRS), which should develop a strengthened first level of care as a gateway or first point of entry for accessing health services in the public network, with geographic affiliation. This means that the functions of stewardship and provision of services have been legally separated and are now under the MSP and SNS, respectively, and reflected in the 2016 and 2017 budgets.

The process of reorganizing the human resources of public services began with pensions for more than 6,500 eligible health workers, and the signing of an agreement with the Medical College to establish new forms of recruitment, compensation, incentives, compliance with schedules for active staff, and health coverage for pensioners. This initiative will include measures to avoid duplication of jobs during the same schedule, extend the hours of attention to the public, and reduce emergency consultations. At the same time, a process of construction, remodeling, and equipping of public hospitals is underway, all integrated within the same network that includes the hospitals of the MSP and those of the Dominican Institute of Social Security (*Instituto Dominicano de Seguros Sociales, IDSS*), to conform with an integrated public network under the SNS. The SNS is calling for a tender for the renewal of directors and key staff of public hospitals, with new selection criteria, including a master's in hospital management for the directors.

In early 2017, Presidential Decree 9-17 transferred 20 hospitals and 40 offices of the IDSS to the public network, consolidating all public providers under the SNS. The press reports that the IDSS hospitals have a debt of RD\$1,600 million that will be assumed by the government and that, in total, the public network currently has a debt of RD\$5,000 million. At the same time, certain schemes that existed to protect the armed forces and pensioners of the public sector have been unified within the RC of SENASA, with the purpose of reducing fragmentation of the social protection system.

In addition, SENASA has a plan to address important chronic diseases with primary care interventions. They have identified 1.8 million people in their database with hypertension and diabetes—the health problems that produce some of the heaviest burden of disease in the country. SENASA intends to create "health clubs" to follow this population, helping them acquire good health habits and monitoring their condition, to ensure effective coverage of preventive interventions.

4. Operational Characteristics of the Subsidized Regime of the SFS

This section describes the operational characteristics of the Subsidized Regime of the Family Health Insurance, which is the main national program to provide health protection to the poorest population. The section includes its organizational structure and interactions with the rest of the health system, the process of identification of beneficiaries and population affiliation, management of resources and information, and the package of health services offered.

Institutional architecture and interaction with the rest of the health system

Although it was established under Law 87-01 and is part of the social health insurance system, the Subsidized Regime can be considered a government scheme,⁸ because it is noncontributory, and fully financed by the state through general taxation. The governing body is the same as that of the SFS—the National Social Security Council (*Consejo Nacional de Seguridad Social, CNSS*), a tripartite body (representing the state, workers' unions, and employers' organizations) headed by the Ministry of Labor, as is usual in this kind of social security organization. The MSP holds the vice-presidency of the Council. Each sector has veto rights, which has caused delays and obstacles in the decision-making process. There are plans to modify the law to assign veto rights only to the public authorities.

The RS is administered by the National Health Insurance (*Seguridad Nacional de Salud*, *SENASA*), which is a publicly owned health risk administrator (Health Risk Administrators, *Administradores de Riesgos de Salud*, *ARS*). As an ARS, SENASA must comply with the requirements established for all these entities and is supervised by the SISALRIL. In addition to the RS, SENASA also affiliates formal sector workers under the RC, and anyone can join it. There is a mandate to provide coverage to public employees who were not previously in a self-administered ARS (such as those of the Central Bank and Reserve Bank, those that protect doctors, teachers, and others). SENASA manages the RS and RC funds in separate accounts.

The funds that finance the SFS are deposited in the Social Security Treasury, the entity responsible for collecting and distributing resources to the ARS. In the case of the RS, the funds are allocated by the government (the Ministry of Finance) for each person affiliated and then the Social Security Treasury disburses funds monthly, through UNIPAGO, a company created for that purpose. The CNSS determines the amount of the per capita payment, based on information from corresponding studies carried out by SISALRIL.

This funding through SENASA is the demand-side financing of the RS and, in the long run, is the way in which it should be fully financed under the law. At present, the bulk of the funding goes through the supply side, financing the operations of the public network of providers—previously managed by the MSP, and from 2016 on, by SNS. In the future, it is envisioned that the process of hiring personnel will be transferred to the establishments themselves and to the Regional Health Services (*Servicios Regionales de Salud*). Implementation of these decisions will conclude the process of separation of the functions of stewardship, financing, and provision, as mandated by the 2001 reform law.

Identification of target population and affiliation of beneficiaries

Law 87-01 clearly identifies the target population of the RS, indicating that it is designed to protect "self-employed workers with incomes that are unstable or below the national minimum wage, as well as the unemployed, disabled and indigent," including the family, (all employed workers, even if they have low salaries, should be affiliated to the contributory regime). The identification of these people is done based on the SIUBEN. The SIUBEN is in the process of revising the database, through a population census that will be completed by 2018.

SENASA has a policy of actively searching for potential beneficiaries. In that sense, the first thing done to join the RS is to verify eligibility, for which consultation with the SIUBEN is mandated. If the person is not registered, he or she can still join, because then SENASA requests that he or she be registered by the SIUBEN after verifying eligibility. The new members are included in the SENASA affiliation database and are then included as new charges for the month to the Social Security Treasury, so the Social Security Treasury can proceed with payments. The member and his or her family receive a SENASA card, issued free of charge. The law does not require the MSP to supervise this process.

SENASA or the CNSS may decide to include certain population groups as part of the RS, as it did with people living with HIV, people with disabilities, domestic workers, children with certain conditions, those living in orphanages, persons deprived of liberty, and poor students of the public system. In addition, SENASA follows up on those born in public hospitals to identify whether they are poor and meet the requirements of affiliation. There is a problem of under-registration of births that affects a certain proportion of the population, which makes them ineligible for SENASA affiliation because they lack documentation. However, they can freely use the open public network to access health services. SENASA has an agreement with the Social Cabinet, the CNSS, and the Electoral Board to enforce the practice of providing birth documents to children before they leave the hospital.

At the point of use of the services, the provider asks the user for his or her membership card. With the identity card, affiliation can be verified, which can be done in the hospital customer service office or in SENASA pavilions located in hospitals. Each member of the RS is assigned to a Primary Care Unit (*Unidad de Atención Primaria, UNAP*), where he or she must go to receive first-level services. This process is just beginning; it is neither compulsory nor widespread. The MSP also identifies members of the population not affiliated to SENASA, for which they are experimenting with a payment-for-performance system, with good results, although it might not be sustainable because of public funding limitations. As SENASA affiliation expands, fewer individuals without a health insurance card are identified by the MSP.

A clinical management system is being implemented in primary care centers, which can also verify the affiliation of those who do not carry the card or a letter from SENASA. This system works partially; it has been implemented more systematically in some of the Priority Health Regions such as VI, VII, and VIII although its use has expanded to another SRS. Although there is a ministerial order to enforce the Clinical Management System (*Sistema de Gestión Clínica, SGC*), there have been problems in its implementation in the rest of the country, due to some rigidities in its design and the number of other different instruments required by programs to be filled at the primary care units. The Clinical Management System needs also to be complemented with a follow-up system at the upper level of care, which has not been developed yet.

At the hospital level, there is a registration and billing system that identifies the members and services provided to them. The letters of affiliation include the affiliate's photo, but the cards do not. Occasionally, adults are asked for a personal identification document. Although progress has been made in that direction and SENASA has audited many of the files, there is always the possibility of fraud. There have been no studies to assess its magnitude, however.

As mentioned, the providers that serve the subsidized population are generally public, as established under Law 87-01. SENASA has the option of contracting the entire public network. This also includes self-managed hospitals and private hospitals, mainly nonprofit (but not restricted to them). When services are not available in the public sector to meet the demand, services are delivered in private and nonprofit establishments, with which SENASA has contracts. For that purpose, there is an authorization mechanism carried out in the offices, the SENASA pavilions at the providers, by internet, or by telephone. High-cost interventions or medications also require prior authorization.

Management of resources

As mentioned, all the resources financed by the RS come from the central government, based on general taxes. It is a fully subsidized system, where there are no copayments for the interventions included in the benefits package. The implementation implies a modernization of the administrative systems of public hospitals, because to contract with SENASA, they need to have some institutional capacity. Health centers and hospitals that participate in the RS are the same ones that operate in the traditional open system—but there is an increasing trend that the population that seeks these services have the insurance card.

For first-level care centers, the capitation payment system is used, wherein capitation payments are made to the *SRS* based on the population living in their respective territories. The list of services to be delivered is established in the PDSS for the first level of care, in accordance with the guidelines of care and the Basic Chart of Medications approved by the MSP.

It is assumed that 20 percent of the funds transferred by SENASA to SRS should be allocated to primary care and first-level outpatient services, with a fixed and a variable component. The variable component is related to the fulfillment of a set of indicators of first-level care, which means there is an intention to finance based on performance. The indicators are established by common agreement among SENASA, the MSP, and the SRS. SENASA follows up on this, establishing mechanisms for performance appraisal and monitoring of contracts through clinical audits, visits, and periodic surveys.

SENASA signs contracts directly with hospitals within a framework established with the SNS (previously with the MSP). However, the referral and counter-referral system, is not properly functioning, especially counter-referrals. SENASA also signs contracts with self-managed hospitals and with private hospitals, for services not provided by the public provider network. Payment at the hospital level is for services rendered. The self-managed hospitals bill monthly to SENASA, which audits the services and invoices and then pays, using certain rates and computer billing systems.

Self-managed hospitals operate with greater autonomy or discretion, because they are decentralized to the SRS, and they have greater independence in their expenses for purchases and payment of personnel. However, there are questions regarding the extent to which all their management decisions consider national priorities. A group of seven third-level hospitals account for 10 to 12 percent of the total financing of the public network.

The government also transfers funds to nonprofit organizations that provide different levels of care, including funds in the annual budget of the MSP. There are some large third-level hospitals owned by these entities, which receive subsidies with no performance requirement, not even to provide services to the SR.

The Subsidized Regime benefits package

The legislation that established the health reform of the Dominican Republic had, from inception, the aspiration of equity and universality, consecrating a single package of benefits for the entire population, regardless of social status. "The purpose of Family Health Insurance (SFS) is the integral protection of the physical and mental health of the member and his/her family, as well as universal coverage without exclusion by age, sex, social, labor or territorial status. Regular access of the most vulnerable social groups and ensuring financial balance, by rationalizing the cost of benefits and the administration of the system" (Law 87-01, art.118). It also indicates that the SFS should include "health promotion, prevention and treatment of diseases, rehabilitation of the patient, pregnancy, childbirth and their consequences" (Law 87-01, art. 119).

At the same time, Law 87-01 clarifies that the Family Health Insurance Subsidized Regime does not include treatments needed due to occupational accidents or occupational diseases, which are covered by Occupational Risk Insurance, established under the Law

on Social Security. The law provides for the establishment of a Basic Health Plan (PBS), which includes (a) health promotion and disease prevention; (b) primary health care, including emergencies, outpatient, and home services; (c) specialized care, complex treatments, hospitalization, and surgery; (d) 100 percent of outpatient medication for the subsidized population and 70 percent for contributory and contributory subsidies; (e) diagnostic examinations; (f) pediatric and preventive dental care; (g) physiotherapy and rehabilitation; and (h) complementary services, including appliances, prostheses, and technical assistance for people with disabilities (Law 87-0, art. 129).

The definition and costing of the PBS went through great difficulties in its implementation process, from the approval of the law in 2001 to the beginning of the RC in 2007, due to the differences among key groups or actors and the lack of technical studies to support it. In 2006 and 2007, there were negotiations on the PBS content and cost, which led to the establishment of a PDSS—based on negotiations rather than on scientific evidence.⁹

At the outset of the RC, the old social insurance plan covered barely 6 percent of the population, consisting of very low-income workers, including mobile workers, such as construction workers and migrants. Alongside this situation, an important private prepaid medicine sector operated with private providers. It protected 12 percent of the population—mainly higher-income employees working in companies that had private health insurance as an additional benefit (La Forgia et al. 2004).

With Law 87-01, it was the private health insurance sector that became the private ARS, maintaining its affiliated population (with right to free choice after one year), but with the obligation to deliver the agreed PDSS in exchange for a per capita payment, eliminating preexisting conditions, and prohibiting exclusions. Their political influence resulted in certain limitations included in the PDSS—such as copayments, sometimes high ceilings of certain coverages, lack of integrality in the offered care, payments for explicit interventions not necessarily linked with rational needs, and other difficulties. It also contributed to the growth of private supplementary plans, without clearly specifying that their coverage is really additional and not meant to substitute for the public insurance regime.

The PDSS is a package of services and procedures, organized into 12 groups each with subgroups, which specify the materials, medical examinations, and procedures covered. They have a code developed by SISALRIL called the National Information and Monitoring System (*Sistema Nacional de Información y Monitoreo, SIMON*), in addition to the Unique Classification Code for Health (*Clasificación Única de Procedimientos en Salud, CUP*), similar to Colombia. The PDSS also uses the International Classification of Diseases 10 code for medical approvals. There is no documentation on the studies that could support the modifications to the PDSS and their cost from 2007 onward. More than technical reasons, political and economic interests were likely to prevail over those decisions (Cañon, Rathe, and Giedion 2014). As a result, there is no well-established institutionalized process using objective and transparent criteria for the revision of the health benefits package in the country.

As the law indicates, the RS has the same package as the RC, approved by the same institutional process. Given the approved limitations of the PDSS of the RC, SENASA (the only ARS that can affiliate the RS population) sought to improve its financial protection, eliminating copayments and caps on drugs and high-cost interventions.

Consequently, there is the paradox of a more complete package for the RS, with greater protection at a much lower cost and with less financing.

This would be feasible if the public provision network operated with quality and efficiency, at a lower cost. But in practice this has not happened. During the 15 years since approval of the health reform, it has not been possible to restructure public provision, due to serious governance problems (for example, inadequate mechanisms to enforce compliance), obsolete or damaged infrastructure and equipment, and inefficiency in the distribution of human resources, resulting in poor quality of services. This is one of the greatest challenges of the Dominican health system, which has focused mainly on the financing side without a commensurate focus on quality improvements in supply and service provision.

In that sense, "it is necessary to build a valid basis of evidence for the definition, adjustment, costing, establishment of per capita value and evaluation of the implementation of the benefit plan in each of the two regimes. In addition, evaluations must be carried out on the actual and effective access to the prioritized services, in order to clarify if there are problems such as: (i) duplication in the financing of public providers via supply and demand, duplication of coverage between the compulsory plan and private supplementary plans; (ii) if there are barriers to access to the services to which the members of the Subsidized Regime are entitled and if the quality of services is equivalent to that of the members of the contributory regime; (iii) if there are differences in access between the population covered by the subsidized regime and the one that attends the public establishments without insurance" (Tristao, Rathe, and Giedion 2013, 22).

In 2016, an important process was initiated to change this situation and to modify the PDSS according to different criteria. The CNSS contracted a study to provide guidelines for the revision of the PBS, which includes the concept of "guaranteed coverage" for priority health problems, instead of the traditional coverage of interventions. The SISALRIL is now in charge of finalizing this effort which, if implemented, would make it possible to organize the model of care around a new PBS, prioritizing prevention.

Management of information in the Subsidized Regime

The issue of the quality of information is key within the health system of the Dominican Republic, and is one of the areas where greater effort is required, both in the production and analysis of data, and in their use for decision making. It has been pointed out that one of the key functions of the stewardship of a health system is health information—including monitoring of health outcomes, performance of providers, and setting specific goals for certain objectives, production and quality of services, and the spending and financing involved. The MSP is legally in charge of this function. However, the MSP's institutional capacity limits its ability to perform this function, resulting in the function being assumed by other entities.

SENASA is accountable to the CNSS and SISALRIL with respect to its progress in the RS and the RC—as mandated by the institutional framework, particularly regarding the transparent and efficient administration of resources. SENASA also has information available on its internet portal, and communication campaigns aimed at expanding its affiliated population, to transmit education on preventive health and to report on mechanisms for utilization of services. There is also a law of free access to public

information in the Dominican Republic, which obliges state institutions to provide the data requested by the public. SENASA is among the entities that work best in this regard.

The SISALRIL publishes monthly the data on affiliation, disbursement of funds to the ARS, and ARS financial statements, including those of SENASA in the RS.

Law 87-01 created an important resource to protect the population, the Affiliate Defense Directorate (*Dirección de Información y Defensa de los Afiliados*), which receives complaints and tracks user satisfaction.

5. Quality in the Dominican Health System

The Dominican health reform has been successful in expanding insurance coverage, currently reaching almost 70 percent of the population covered by the Family Health Insurance. Nevertheless, there are still important issues to be resolved. Despite sustained economic growth and diversification of the economy, policies to reduce social inequities and solve basic human development problems, including coverage of services of drinking water and basic sanitation, and of gender equity, have not been implemented. In terms of potable water, for example, measured as the percentage of population with access to improved water sources, the country is in the last place of 19 Latin American countries sources (see table 1).

That means that certain DR health indicators lag behind most countries in the region, particularly those related to maternal, infant, and neonatal mortality. One of the most worrying health indicators is the high adolescent pregnancy rate, which reflects deep social problems such as lack of opportunities, poor results of the education system, lack of access to services and sexual education of the young, domestic violence, and sexual abuse. This has serious implications for cross-generation poverty and accounts for many maternal and newborn deaths. The Dominican Republic has the second highest adolescent fertility rate among 19 Latin American countries, with a rate twice that of Argentina, Cuba, and Peru (Rathe and Suero 2017).

These results are incongruent with those related to access, coverage, and resources of the health system, in which the Dominican Republic is generally above average (such as prenatal care, institutional care of births performed by professionals, immunizations, number of doctors and nurses, and number of beds and establishments). For a long time, this situation has been considered the paradox of the country's health system. This suggests deficiencies in the quality of the services, inequalities in the regional distribution of the resources, and inefficiencies in public expenditures.

An example of inequities in the distribution of resources is that the average number of doctors per 1,000 inhabitants in the Dominican Republic is 2.1, which is among the highest four in the Latin American region. But the ratio in Santo Domingo, the capital, is 5.1, more than twice the national average. Santo Domingo's ratio is also much higher than the 3.2 regional averages in Organisation for Economic Co-operation and Development countries (Rathe and Suero 2017).

For years, there have also been governance problems in public services, such as frequent strikes, absences of health workers, failure to meet schedules, services and procedures supposedly performed by qualified personnel according to guidelines but actually carried out by residents (doctors that are graduate students in some specialty), lack of professional nurses, and other inefficiencies that translate into poor quality of services (MSP/Capacity Plus/USAID 2011). With respect to quality, there are studies that show lack of compliance with current norms in pregnancy care, obstetric emergencies, peripartum, delivery, and cesarean sections, which is probably impacting on the poor indicators of neonatal and maternal mortality (Perez-Then 2011). Another important factor is the high rates of C-sections in the country, which averaged 56 percent of births in 2013 (ENDESA 2013), compared to international recommendations of 10 to 15 percent.¹⁰

In addition, as mentioned on page 15 of this study, only sixty percent of primary health care units have been qualified to provide health services while only 53 percent of all health facilities have been qualified by the MSP as fully complying with standards that include of infrastructure, equipment, and human resources.

These quality problems that translate into poor health outcomes are part of the inequity and poor distribution of income and opportunities. The country has world-class providers with international accreditations that provide health tourism services in certain specialties, and some of them even receive subsidies from the state. However, the traditional public network has for decades been underfunded, without proper organizational direction or supervision.

Solving these problems of quality of the Dominican health system, and particularly in the RS, requires strong and committed actions to restructure and organize the public network. A key issue is the allocation of sufficient public funds to the health system, particularly to cover the underprivileged population. Historically, Dominican governments have allocated only limited funds to this. In fact, public spending in relation to total health spending is below the Latin American average, with the country placing 16th among 19 Latin American countries (Rathe and Suero 2017). It is clear that the health sector needs more funds, but increased funding must be accompanied by concrete actions to improve the quality of expenditure, as well as transparency in implementation and accountability requirements.

The Dominican health reform clearly aspires to achieve universal coverage with the same Basic Health Plan for the entire population. However, despite the success of affiliation, there are doubts about the actual protection that the current PDSS offers to different population groups.

In fact, there are large financing differences between the RC and RS. The per capita spending in 2016 of the RS was RD\$201 per affiliate per month,¹¹ much lower than the RC per capita spending of RD\$915 per person per month, or US\$53 and US\$240 per person per year, respectively.¹² This difference is partly because the RS operates with public providers, which receive supply-side financing. In 2014, the amount allocated by the MSP to pay for health services of individuals amounted to RD\$20,000 million pesos; transfers to finance self-managed hospitals amounted to RD\$2,700 million. However, even if these resources are included to estimate the total financing of the RS, the per capita spending would be of RD\$271 per person per month (considering the population affiliated

to the RS), which is equivalent to US\$201 per year (at the 2016 exchange rate) and still below the RC's annual per capita spending (US\$240).

This could be considered acceptable if the public system only served the people currently affiliated with RS, since public providers have salaried employees and could have greater possibilities of cost containment than the private sector, which relies on fee-for-service payment. However, the reality is that this network is open, and anyone who needs services must be taken care of including those who are not affiliated with any insurance regime, and those who have insurance and want to avoid copayments. This leads to the conclusion that the funds allocated for the protection of the lower-income groups are still low, both in absolute terms and in comparison, with the funds destined to finance the insured formal population.

Quality issues faced by public facilities and the limited budget allocated to finance the public provision of health services. have not contributed to overcoming the perception that there are important differences in quality between care in public and private services. While the ENDESA 2014/15 does not show important differences in utilization/coverage of health services per se between affiliates of the RS and RC, a much lower percentage of RC affiliates use public providers even for preventive consultations/services even though they have a choice between using public and private providers, suggesting possible quality differences (real or perceived) between public and private health facilities.

Consequently, the key issue to guide the country toward universal coverage with equity and without excessive financial burden, is the allocation of more public resources to SENASA to protect the almost poor and vulnerable population that is still outside the RS. At the same time, the public network must be restructured and organized so that it can adequately provide the services included in a new PBS, designed based on the priority needs of the Dominican population, guaranteeing integral care. This process should be monitored closely.

6. Pending Agenda

This paper has shown that health reform in the Dominican Republic has been successful in affiliating the population to the Family Health Insurance with a complete package of services with the same content for all, although with different forms of financing and provision of services. The financing mechanisms and the establishment of the related institutions have also been successfully developed. However, the public service network, which is legally in charge of providing care to the lower-income population, lagged behind in its restructuring process, with serious problems of quality, efficiency, and governance. Thus, population health outcome indicators remain well behind most countries in the Latin American region, although many of the coverage goals have been achieved.

As mentioned, in 2016, the Dominican government began to take crucial steps to deepen health reform, including the creation of the SNS and the initiation of the process of implementing a unified network of public provision with restructuring measures. It seems there is now the political will needed to guide the country along the path of universal coverage with equity. However, there remain outstanding issues in protecting the most vulnerable segments of the population, and one of them is the importance of improving quality in the whole system, primarily in the public network. A systematic quality assurance mechanism that covers all regimes, but particularly the subsidized one, would help in this process. The digitalization of clinical files may contribute toward improving management of care, facilitating benchmarking for integrated networks of care and in monitoring intermediate outcomes.

A preliminary bill to amend Law 87-01 is under consideration that would make it mandatory to join a first-level center in the whole system, both in the RS and RC, finally making the referral and counter-referral system effective. Although this has not been widely discussed or approved yet, and therefore there are no details on how this would happen, there is a proposal that the RC population choose a preferred provider for their first contact, within the network offered by the ARS to which he or she is affiliated. The user can change this provider after one year. It has been pointed out that the proposal for the Contributory Regime/RC introduces certain distortions to the integrality of the provision of individual health services in relation to the community services (*salud colectiva*) that are overseen by the MSP and that correspond to geographic criteria. For that reason, the provider's assignment in the Subsidized Regime/RS will be geographic and defined by the SNS.

Nonetheless, the decision to assign persons covered under the RC to a first level care provider, although not necessarily linked to the geographic location of the user's home, but chosen for convenience or other reasons will introduce a greater rationality to the present use of health services. This will contribute to decreasing both the excessive use of emergency services that exists today, and the direct consultations to specialists for first-level health problems. This will decongest the main hospitals and contribute to reducing costs at the national level.

The effective development of the first level of care and its establishment as a gateway to the health system, as embodied in the health reform legislation of 2001, involves a major effort to build and equip health facilities and allocate human and financial resource. It also requires, the development of management capacities that allow the registration and affiliation of the population and its monitoring through the health system with adequate referral and counter-referral mechanisms. This also involves institutionalizing patient follow-up processes through the clinical management system or other similar instruments, both at the first level of care and in hospitals.

The proposed reform of Law 87-01 also includes explicit efforts to combat evasion and avoidance of the social security system, including autonomy for the Social Security Treasury and the Affiliate Defense Directorate. Likewise, the proposed reform would eliminate the RCS, which has never been implemented, and the distribution of its target population to the two existing regimes (RC and RS).

As we have seen, there is still a need to expand affiliation, since there are currently about three million people without health insurance coverage in the Dominican Republic. A good part of this group are families on the edge of poverty, barely above a poverty threshold. It might be feasible to expand the definition of the poor beyond the current one in the SIUBEN, to allow a larger number of low-income people to be part of the RS— with careful thought given to changes in the coverage of other subsidies, considering the country's overall fiscal space and the possible implications outside the health sector. An

important direction to expand the entitlements would include improving the documentation processes to register Dominican children at birth, reducing the administrative barriers that hinder them, and streamlining procedures for late declarations.

The proposed reform of Law 87-01 seeks alternatives to incorporate the informal sector. Among the topics under consideration is the cross-checking of information between the Tax Department (*Dirección General de Impuestos Internos, DGII*), SIUBEN, the Social Security Treasury, and other sources, to identify the vulnerable population and the population that has contributory capacity. Greater autonomy for the Social Security Treasury will, in turn, allow high-income independent professionals to be incorporated into the system. There has been mention of incentivizing the formalization of microenterprises by postponing obligatory contributions to the pension scheme for a few years, so that the financial burden of formality would not be so high.

The draft bill modifies the right to veto, giving greater decision-making autonomy to the state based on the difficulty achieving decisions inside the CNSS—where the representatives of the workers and the business sector have the right to veto every decision they believe goes against their interests. This situation has made the operation of the CNSS very slow during its existence.

Another key aspect of the pending agenda to achieve greater health and financial protection within social insurance is the in-depth revision of the PBS so it is built on guaranteed coverages of certain health conditions considered to be priorities. Studies are currently underway on this, and decisions have not yet been made about what conditions to include or what protocols will be used to address them. Still to be determined are how these health conditions will be addressed, and the cost calculation and monitoring system, particularly to ensure compliance with the rights that will be acquired by users. This PBS review implies a restructuring of the health care model, both in the RC and RS to introduce rationality and control costs. In the RS, it is essential to ensure that the capacity to address these problems is available —and to establish the way in which the services and care will be addressed and financed. Currently, SENASA contracts a significant amount of its services from the private sector (see table 2) using a fee-for-service type of payment, which should probably be revised.

It has been suggested that the entire health production function should be articulated around the PBS (Rathe and Suero 2017), which should be followed up closely to ensure its effective implementation, as a strategy toward universal coverage.

This implies determining how much resources are needed to achieve effective protection of the poor to reduce or eliminate funding differences between the RC and RS and, therefore, increase public funding for the RS. More people need to be covered, but legal coverage is not enough. It is necessary to ensure that the benefits provided in the PBS are delivered, that is, that the services required by the population are effectively covered. This will also reduce out-of-pocket spending.

For that to be possible, it is necessary to monitor the financial situation of all entities of the system, particularly SENASA, and to continue strengthening their institutional capacity to carry out the financial and technical audits of health providers. The payment mechanisms should also require revision, because they are mostly based on fee-forservice at the hospital level, which tends to increase system costs. In addition, the permanent monitoring of the financial sustainability of the Family Health Insurance and the PBS is fundamental, while a systematic analysis of the fiscal space is carried out, as part of the stewardship function.

There are certain issues that have never been discussed in the country and that would be worth putting on the table. One is the possibility of establishing the compulsory nature of health insurance for all Dominicans. Those who are not wage earners would have two options: either to buy compulsory insurance (those with higher incomes) or to join the Subsidized Regime (by expanding the definition of poverty to include categories higher than those currently defined). The population above the current poor who choose to affiliate to the RS could pay a copayment at the point of services (if they have some contributory capacity, although knowing that this decision is not an equitable one). The independents who would be obliged to buy compulsory insurance might have the option of less coverage than the formal sector (so that the payment per person is not so expensive). Studies would be required to assess the feasibility of these options.

Another issue that has not been considered in the discussions on the financing of the system is the one related to remittances received by Dominicans from relatives abroad. Remittances constitute the second component of the country's foreign exchange earnings, after tourism, accounting for more than 7 percent of GDP.¹³ In 2016, US\$5.262 million was received from remittances, equivalent to RD\$242 billion Dominican pesos, most of which were channeled through formal sources within the financial system.¹⁴

According to National Household Survey figures for 2011, 17 percent of Dominican households receive remittances from abroad, and 42 percent of them said they use remittances to pay for health expenses.¹⁵ There are no specific studies quantifying the amount of resources allocated to these purposes, but the previous figures lead to the conclusion that these are substantial amounts. There is conclusive evidence worldwide that remittances are used to finance health expenditures.^{16, 17}

In some countries, remittances are used to formally finance the health system. For example, in the Philippines, the government promoted the use of contributions from Filipinos working abroad to pay for the coverage of their relatives residing in the country¹⁸. Given the Dominican Republic's fiscal space restrictions, this possibility could be considered.

Other possibilities of new sources of funding are taxes to sugary drinks and fast foods. The first one has been introduced to discussion into Congress but should include an earmark to finance the health sector, which has the burden of the illnesses that result from their use.

Today, 16 years after health sector reform began in the Dominican Republic, steps are finally being taken that could lead to the achievement of true health coverage, on the way to universal coverage. It is essential to closely monitor implementation of these key decisions and the allocation of funds that accompany them, concomitantly with the monitoring of the indicators of quality of expenditure, quality of services, and health outcomes of the population.

Notes

¹ The enigma of Dominican growth is the result of a labor market that does not seem to fully reward workers for their increasing productivity, an internal economy with weak intersectoral links, and a public sector that does not spend enough or particularly well to reduce poverty (World Bank 2016).

² The Dominican reforms in health and social security began late relative to other countries of the

continent, and perhaps for the same reason, reflect some influences of the predominant tendencies at the international level, particularly in the experiences of Chile and Colombia (Castellanos, Pedro Luis; Jefrey

Lizardo, Bernardo Matias, Luis Morales, C.Rosa Chupani, Rosa Maria Suarez. 2009).

³ Law 42-01 defines the national health system; the entitlements of the population; the scope of the stewardship function assigned to the MSP, including rules for the accreditation of providers; regulations of pharmaceuticals; quality and organization of providers; and other issues.

⁴ Data may not be comparable. The years shown in the graph correspond to the National Household Demographic and Health Survey (ENDESA), while the data for 2016 correspond to poor population, according to SIUBEN and affiliation data from SENASA.

⁵ It is not possible to evaluate advances because there are no new household consumption and expenditure surveys.

⁶ The ENDESA is not a recommended source for this kind of analysis. An income and expenditures survey would be a better instrument; however, the one available is for 2006–07, before implementation of the reform.

⁷ Rathe and Suero state, in their 2017 book, *Salud, visión de futuro: 20 años después (Health Vision of the Future: 20 years later)*: "This conclusion is very different from the one obtained if the household expenditure is calculated with ENDESA, which has a comparable module of morbidity, utilization and spending on health, that has been in effect since 1996 and presents a substantial reduction between 2007 and 2013. Although this would seem to be a logical conclusion given the increase in public funds and the extension of Family Health Insurance affiliation, it does not seem verified when it is triangulated with other sources, which is what the Central Bank does when calculating the National Accounts figures that measure the GDP. For this reason—and given the methodological guidelines suggested by WHO, the latter estimates are adopted for this paper. However, it should be noted that the results of the ENIGH Household Income and Expenditure Survey 2006–2007, which was implemented just before the start of the health reform, are still used in the structure of calculation of private consumption" (Rathe and Suero 2017, 225).

⁸ The framework to classify health financing schemes used internationally is the System of Health Accounts (SHA 2011), create by the WHO, OECD, and Eurostat.

⁹ A detailed discussion on the PDSS can be found in Cañon, Rathe, and Giedion (2014).

¹⁰ It would be interesting to see if it is possible to analyze quality differences between the RC and the RS affiliates, crossing some indicators with type of affiliation in the DHS database. In the case of maternal care, the published data for 2013 does not reveal important differences in access to prenatal care nor institutional delivery with medical professionals among women with different level of education, which could be a proxy for insurance affiliation.

¹¹ On March 16, 2017, the per capita payment of the RS was increased to RD\$216.38 per month.

However, there is still an important difference.

¹² As of the exchange rate in November 2016.

¹³ BCRD 2014.

¹⁴ BCRD 2014.

¹⁵ ENHOGAR 2011

¹⁶ Bebczuk, Ricardo, and Battistón 2009.

¹⁷ Amuedo-Dorantes, Sainz, and Pozo 2007.

¹⁸ Overseas Filipino members may avail themselves of PhilHealth benefits even if they are confined in hospitals abroad. At the same time, their qualified dependents in the Philippines may avail themselves of the benefits even if the principal is working overseas (https://www.philhealth.gov.ph/members/overseas/)

References

- Amuedo-Dorantes, Catalina, Tania Sainz, and Susana Pozo. 2007. Remittances and health care expenditure patterns: evidence from Mexico. Buenos Aires, Argentina: The Institute for the Integration of Latin America and the Caribbean, Inter-American Development Bank.
- Banco Central. 2014. Las remesas en la economía dominicana: análisis para el período 2010–2012. Santo Domingo: Banco Central de la República Dominicana.
 - . 2015. Encuesta Nacional de Fuerza de Trabajo. Santo Domingo: Banco Central.
- Bebczuk, Ricardo, and Diego Battistón. 2009. *Remittances and Life Cycle Deficits in Latin America*. Washington, DC: World Bank.
- Cañon, Oscar, Magdalena Rathe, and Ursula Giedion. 2014. *Estudio de caso del Plan de Servicios de Salud PDSS de la República Dominicana*. Santo Domingo: Banco Interamericano de Desarrollo, Nota Técnica #IDB-TN-683, 2014.
- Castellanos, Pedro Luis; Jefrey Lizardo, Bernardo Matias, Luis Morales, C.Rosa Chupani, Rosa Maria Suarez. 2009. *El nuevo modelo del sistema de salud: inicios, rutas y dificultades*. Foro Politicas Sociales y Bienestar Numero 7.
- CESDEM (Centro de Estudios Sociales y Demográficos). 2002. *Encuesta Nacional Demográfica y de Salud ENDESA* (ENDESA). Santo Domingo: Centro de Estudios Sociales y Demográficos.
- CNS (Comisión Nacional de Salud). 1996. Salud, Visión de Futuro: Elementos para un Acuerdo Nacional. Santo Domingo: Comisión Nacional de Salud.
- CNSS (Consejo Nacional de la Seguridad Social). 2012. Ley No. 87-01 que crea el Sistema Dominicano de Seguridad Social y sus modificaciones. Santo Domingo: Consejo Nacional de la Seguridad Social.
- ENHOGAR (Encuesta Nacional de Hogares). 2011. Oficina Nacional de Estadísticas (ONE), Santo Domingo.
- ENFT (Encuesta Nacional de Fuerza de Trabajo [Labor Force Survey]). 2016. Santo Domingo: Central Bank of the Dominican Republic.
- INTEC/Plenitud (Instituto Tecnológico de Santo Domingo/ Fundación Plenitud). 2017. Salud Visión de Futuro: 20 años después. Santo Domingo: INTEC/PLENITUD.
- La Forgia, G., R. Levine, A. Díaz, and M. Rathe. 2004. "Fend for yourself: systemic failure in the Dominican health market and prospects for change." *Health Policy* 67 (2):173–86.
- Ley 87-01. 2001. Congreso Nacional de la República Dominicana, Santo Domingo, República Dominicana.
- MSP (Ministerio de Salud Pública). 2012. Modelo de atención para el sistema de salud en la República Dominicana. Santo Domingo: Ministerio de Salud Pública.
 - -. 2016. *Memorias 2015*. Santo Domingo: Ministerio de Salud Pública.
- MSP/Capacity Plus/USAID (Ministerio de Salud Pública/Capacity Plus/United States Agency for International Development). 2011. Informe del Diagnóstico de Situación Rápida sobre la Gestión de Recursos Humanos en Salud. Santo

Domingo: Ministerio de Salud Pública/Capacity Plus/United States Agency for International Development.

- OECD/WHO/Eurostat (Organisation for Economic Co-operation and Development/World Health Organization/Eurostat). 2011. System of Health Accounts. Paris: Organisation for Economic Development.
- Ortiz, Altagracia. 2017. "El 65% de centros privados están habilitados," *Hoy*, February 16.
- Perez-Then, Eddy. 2011. Evaluación de la calidad de la atención obstétrica en establecimientos de segundo y tercer nivel en las regiones 0 y II de la República Dominicana. Santo Domingo: Fundación PLENITUD / Banco Interamericano de Desarrollo, dentro del Observatorio de la Salud de la República Dominicana.
- Rathe, Magdalena. 2010. *Dominican Republic: Can universal coverage be achieved?* World Health Report, Background Paper, No. 10. World Health Organization, Geneva.
- Rathe, Magdalena, and Alejandro Moliné. 2011. "The Health System of Dominican Republic." *Salud Pública México* 53 (Suppl 1): S197–S206.
- Rathe, Magdalena, and Dayana Lora. 2005. *Nicaragua: Salud y Equidad*. Managua, Nicaragua: Informe de consultoría para MSH / USAID.
- Rathe, Magdalena, and Lora, Dayana. 2012. *Evolución del gasto de hogares 1996–2010*. Santo Domingo: Ministerio de Salud Pública.
- Rathe, Magdalena, and María Isabel Santana. 2009. *Catastrophic Health Expenditures in the Dominican Republic: Analysis of Determinants and Linkages to Impoverishment*. Santo Domingo: Fundación Plenitud / Fundación Mexicana de la Salud / Observatorio de la Salud de América Latina y el Caribe, México / República Dominicana.
- Rathe, Magdalena, and Natalia Rojas. 2012. Protección financiera en salud en la República Dominicana: Análisis del gasto catastrófico y empobrecedor en salud de los hogares dominicanos beneficiarios del sistema de subsidios sociales. Santo Domingo: Banco Central-Banco Interamericano de Desarrollo.
- Rathe, Magdalena, and Pamela Suero. 2016. *Salud, visión de futuro: 20 años después*. Santo Domingo: Plenitud/INTEC – Observatorio del Sistema de Salud.
- Rathe, Magdalena, and Patricia Hernández. 2015. *Gasto y financiamiento a la salud en la República Dominicana*. Santo Domingo: Plenitud/INTEC/ADARS.
- Rojas, Natalia. 2011. *Estimación del gasto catastrófico y empobrecedor en base a la ENIGH 2007*. Santo Domingo: Informe final de consultoría realizado para el Observatorio de la Salud de la República Dominicana, Fundación Plenitud / Banco Interamericano Desenvolvimento.
- SISALRIL (Superintendence of Health and Occupational Risks and Labor Force Survey). http://www.sisalril.gov.do/EstadisticasdelSfs.aspx.
- Tristao, Ignez, Magdalena Rathe, and Ursula Giedion. 2013. *Nota de políticas del sector salud*. Santo Domingo: Inter-American Development Bank.

- World Bank. 2016. Para construir un mejor futuro juntos: notas de políticas de República Dominicana. Washington, DC: World Bank.
- World Development Indicators. 1996–2015. World Bank, Washington, DC. http://data.worldbank.org/products/wdi.

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