



From the Patient's Perspective

Experiences with Primary
Health Care in Latin America
and the Caribbean

Edited by

Frederico Guanais
Ferdinando Regalia
Ricardo Pérez-Cuevas
Milagros Anaya

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Acknowledgments

This book is the product of a study that listened to the voices of former, current and future patients and health system users in Brazil, Colombia, El Salvador, Jamaica, Mexico and Panama. Our hope is that these voices will be representative of the almost 400 million people in those countries and will serve as a tool to create public policies that improve the primary health care (PHC) experience throughout the Latin American and Caribbean region.

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Preface

Winston Churchill is credited with stating that “democracy is the worst form of government, except for all the others.” It is tempting to say the same may be true of different ways to organize health systems; all options require balancing difficult and often competing objectives, and nearly all have difficulties meeting the complex and ever-changing needs of their populations. But an increasingly solid body of evidence suggests that one essential component of building a successful and resilient health system is to base it firmly upon a foundation of primary health care.

The arguments for strengthening primary health care are numerous and increasingly urgent in our rapidly ageing world. Healthcare must become more comprehensive, integral, and integrated to meet current needs as well as newly emerging challenges such as chronic diseases and comorbidity (McPhail 2016). Health systems must become more patient-centered to deliver more appropriate care where and when people it (World Health Assembly 2016). And this care must be integrated both vertically (from the community to all levels of the health system) and horizontally (across different types of communication, support, diagnostic, and therapeutic services) (Loewenson *et al.* 2017).

Primary health care has been termed the “central nervous system of a country’s health system” (The Economist 2017), since it must aggregate, store, and channel patient experiences and information to serve as each person’s medical home (Bauer *et al.* 2014). These features help to build trust in the health system, an increasingly

recognized factor that may ultimately affect the system’s ability to communicate information that citizens deem legitimate, to enhance activities related to improving access to preventive care, and even aid in its long-term political and economic sustainability (Gille *et al.* 2015).

In 1978, the Declaration of Alma-Ata, adopted at the International Conference on Primary Health Care, identified the key role of primary health care as one of protecting and promoting health for all. The fact that we have reached the 40th anniversary of the Declaration of Alma-Ata without universal primary health care demonstrates that building an international consensus has been an important challenge in health system transformation. Still, the region of the Americas has been a leader in constructing a series of international agreements to help bridge this gap. In 2005, the countries of the Americas agreed to strengthen the primary care basis of their health systems as part of the Declaration of Montevideo, which stated that countries advocate for the integration of PHC principles in the development of national health systems (PAHO 2017).

What has happened since then? While there have been important country-level developments, perhaps the most significant global event has been the incorporation of health systems goals through the Sustainable Development Goal for universal health coverage (UHC), which reiterates the importance of the health system in prevention, treatment, and rehabilitation and the role of UHC in protecting people from social exclusion,

catastrophic and impoverishing payments for needed health services (Moreno-Serra and Smith 2012). Importantly, the SDGs, for the first time, require countries to develop a set of specific goals as well as a strategy to monitor their achievement.

So, these questions remain: How do countries strengthen primary health care within the context of universal health coverage? Where do they start? What strategy is best suited to their population and their existing health services infrastructure? While evidence is emerging, it is probably not an understatement that the lack of comparative, up-to-date, and policy-relevant data has been a major limitation in fulfilling the ambitions of Alma-Ata, the Declaration of Montevideo, and UHC in the region of the Americas.

This book summarizes results of the first contemporary cross-country comparison of primary care services and systems across all major LAC regions. While it is limited by the inclusion of only six countries, its scope is wide and the insights it provides help to develop a roadmap for strengthening primary health care within the different social, economic, political, and epidemiologic contexts of our diverse region. What can we learn from its results?

First, the series of studies demonstrate that monitoring primary health care from the user's perspective is a feasible and effective strategy. The studies were planned and implemented relatively quickly and at reasonably low cost. They could be replicated in new national contexts and even repeated on a regular basis to evaluate the impact of major reforms.

Second, specific primary care functions (first contact, access, coordination,

longitudinality, comprehensive care, and patient-centeredness) can be assessed from the user's perspective within countries (comparing users of different subsystems of primary care) and across countries with the region. Study results presented here have already produced a wealth of information for national health systems to establish baseline measures of primary care performance and to identify specific areas for prioritization.

Third, because the studies were based on a common set of tools used for nearly 15 years by the Commonwealth Fund to monitor primary care in 11 OECD countries, it is possible (as the authors demonstrate) to benchmark country progress against a set of high performing health systems, such as those of the UK, the Netherlands, or Sweden, each of which excels in different areas (Osborn *et al.* 2016). This creates the opportunity to create truly global communities of practice to accelerate the exchange of information and best practices.

Fourth, the results point to common challenges across countries (such as patient orientation and coordination of care) which could benefit from more targeted use of health information systems (including electronic health records) and payment reforms that reward more integrated, patient-centered care rather than simply rewarding the quantity of services provided. Country-specific lessons include the observation that in locations where financial barriers to care may be low, organizational barriers (such as the hours of operation of a public clinic) may still be present.

Finally, these studies show that people's primary care experiences are essential determinants of how they view the overall

health system—even aspects of it they may not have personally experienced. By strengthening the primary care basis of national health systems through regular monitoring and rigorous evaluation, decision makers in the health arena may be able to build trust and to fulfill the promise of a universal health system that achieves the lofty goals of Alma-Ata while remaining grounded in the needs of our diverse, increasingly long-lived and prosperous populations.

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October 2017

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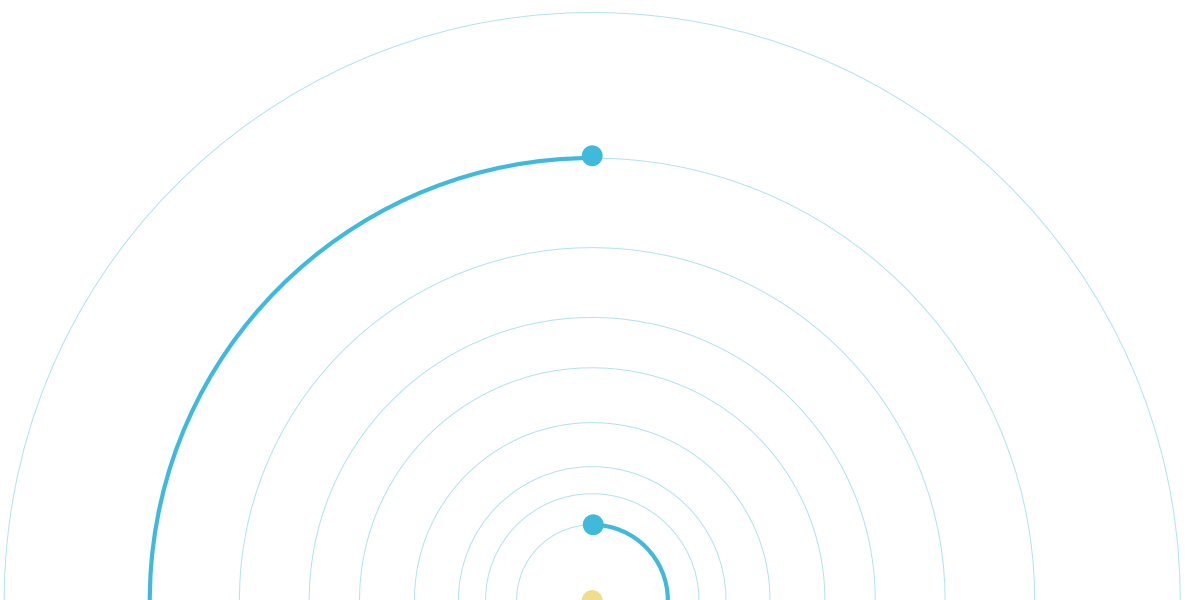
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Acronyms

AHRQ	Agency of Healthcare Research and Quality
CELADE	Latin American and Caribbean Demographic Center
COW-CATI	Computer Assisted Telephone Interview Over Web
CSS	Social Security Fund
DALY	Disability-adjusted life years
ECLAC	Economic Commission for Latin America and the Caribbean
ECOS-E	Specialized Community Health Teams
ECOS-F	Community Family Health Teams
EPS	health promoting enterprise (Colombia)
ESF	Family Health Strategy
GDP	gross domestic product
IDB	Inter-American Development Bank
IHME	Institute for Health Metrics and Evaluation
IHP	International Health Policy Surveys
IMSS	Mexican Social Security Institute
IPS	health care provider institutions
ISBM	Salvadoran Institute for Teachers' Welfare
ISSS	Salvadoran Social Security Institute
ISSSTE	Government Workers' Social Security and Services Institute
JADEP	Jamaica Drugs for the Elderly Program
LAC	Latin America and the Caribbean
MAIS	Comprehensive health care model
MINSA	Ministry of Health of Panama
MINSAL	Ministry of Health of El Salvador
MOH	Ministry of Health
MSPS	Ministry of Health and Social Protection
NCDs	non-communicable diseases
NGO	Non-governmental organization

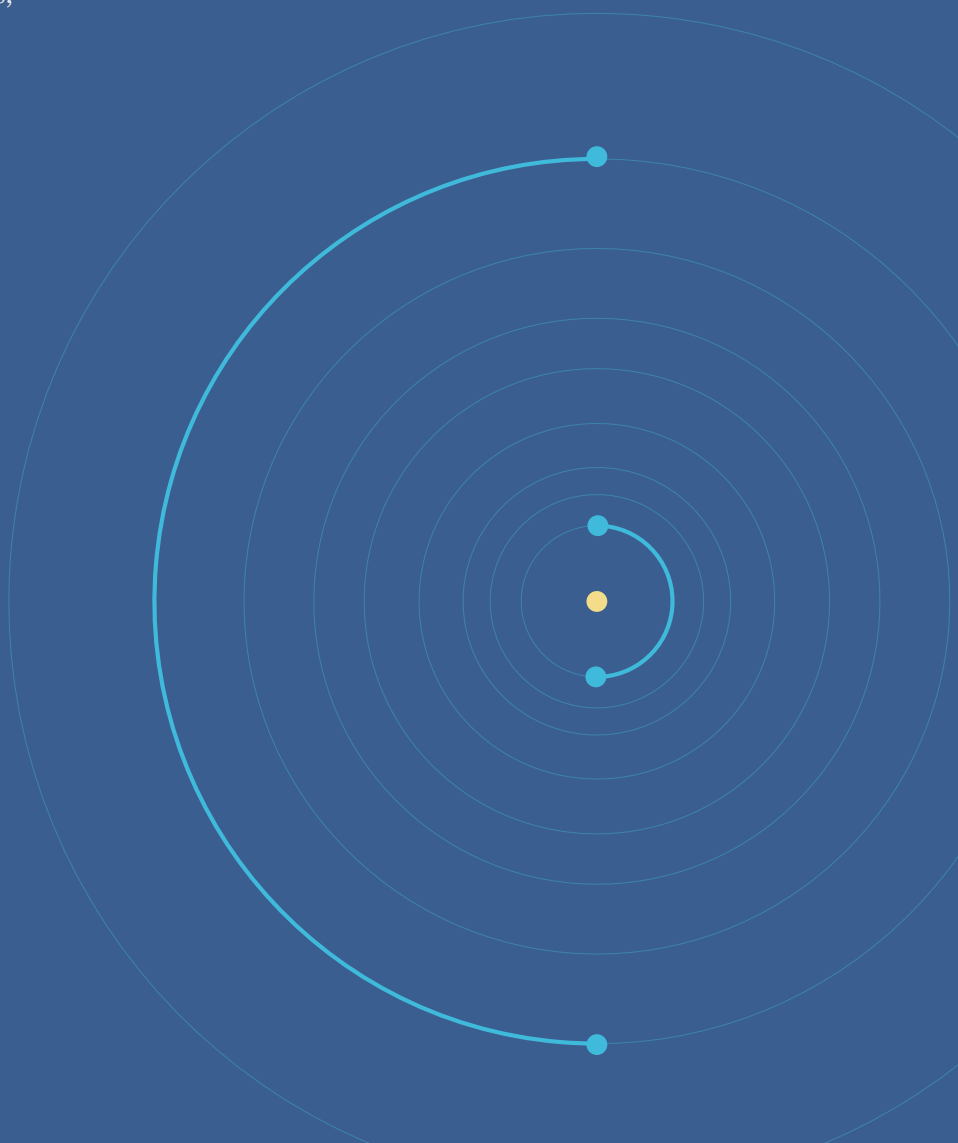
NHF	National Health Fund
NHS	National Health Service
OECD	Organization for Economic Cooperation and Development
PAHO	Pan American Health Organization
PAIS	Comprehensive Health Care Policy
PC	Primary Care
PCMH	Patient-Centered Medical Home
PCP	Primary care physician
PEMEX	<i>Petróleos Mexicanos</i>
PHC	Primary Health Care
PMAQ	Program for Improving Primary Care Access and Quality
POS	Compulsory Health Plan
PR	Prevalence ratio
PREMs	Patient-Reported Experience Measures
PROMs	Patient-Reported Outcomes Measures
PSF	Family Health Program
RIISS	Comprehensive and Integrated Health Care Service Networks
RIM	Random Iterative Method
SdS	Ministry of Health
SEDENA	Ministry of Defense
SEMAR	Ministry of the Navy
SGSSS	General System of Social Security in Health
SUS	Unified Health System
UCSF	Family Health Community Units
UN	United Nations
WB	World Bank
WHO	World Health Organization



Context and Challenges of Health Systems in Latin America and the Caribbean

1

Frederico Guanais,
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Introduction

In recent years, there has been growing interest in designing user-centered public policies, also known as human-centered design or design thinking (Bason 2016; Salmon *et al.* 2015). The design process focuses on the perspective and needs of the user, using rapid successive prototyping and iteration and integrating feedback to generate feasible, desirable and practical solutions. Although the process of designing user-centered public policies requires significant adaptations to the policy cycle, a very relevant point is the ability of public administrations to listen and learn. How should the user's perspective be incorporated into the design, implementation, evaluation and feedback of public policies? What methodological tools are necessary to do so? What conclusions can be drawn from users' perspectives to create public policies that better fit their expectations? These questions served as the springboard for the research study that led to the results presented in this book.

In health systems, the perspective of health service users—that is, patients—provides valuable information and is fundamental to strengthening person-centered care; however, the patient perspective is largely underanalyzed in the Latin America and the Caribbean (LAC) region. The concept of person-centered care is useful to organize the provision of services, taking into account the needs, experiences and preferences of the patient in a comprehensive manner (Ogden *et al.* 2017;

Constand *et al.* 2014; Dwamena *et al.* 2012). In fact, increased levels of patient satisfaction have been associated with high levels of safety and clinical effectiveness among different groups of diseases (Doyle *et al.* 2013). Although patients' perspectives are occasionally regarded as reflecting purely subjective perceptions, there are objective ways of measuring these insights, thereby allowing for the identification of areas for improvement, if it occurs within a system of continuous quality improvement. Likewise, the collection of data on patients' perspectives offers the possibility of strengthening social inclusion, as well as the expansion of social participation in the health system and the transparency of public and private health institutions.

Both in the literature and in the practice of health systems, support for the incorporation of the patient perspective is increasing. The types of indicators used to quantify patient perspectives are known as patient-reported outcome measures (PROMs) and patient-reported experience measures (PREMs) (Baumhauer 2017). PROMs gauge patients' perception of their health status, their functional capacity and their health-related quality of life; that is, they measure the outcomes of a specific health intervention (treatment, procedure, etc.) in a specific patient. PROM results must be interpreted within a context in which providers also have limitations in terms of time, physical resources, personnel and inputs (Miller *et al.* 2015). In 2009, the United Kingdom's National Health Service (NHS) made the administration of PROMs mandatory for certain conditions, and the results are publicly available. Since then, the number of conditions for which PROMs are reported has been steadily growing (NHS Digital 2017).

PREMs are instruments that capture and measure patients' experiences with some aspect of health care services. They can be used to evaluate the quality of care or to monitor the improvement of services. Their use has spread in countries such as the United Kingdom, where it has given rise to initiatives such as a service redesign based on patient experiences (Mockford *et al.* 2012; Pickles *et al.* 2008). Furthermore, it is increasingly understood that it is not enough to consider the patient's perspective; this information must be used to improve health services through formal quality improvement processes (Gleeson *et al.* 2016).

To date, there is very little published evidence about how the health experiences of citizens in LAC countries compare to each other and how they contrast with those of people in industrialized countries. This information gap is particularly relevant in a context in which many countries in the region have carried out ambitious reforms aimed at universal health coverage (UHC). This is the case of the introduction of *Seguro Popular* in Mexico during the first decade of the 2000s (Knaul *et al.* 2012) and the elimination of user fees in Jamaica in 2007 (Beuermann and Pecha Garzón 2016; De La Haye and Alexis 2012). Other countries have aimed to strengthen the orientation of their health systems toward primary health care (PHC), as in the case of El Salvador through the introduction of a community health model (Ventres 2013) or of Brazil with the national expansion of its Family Health Program (Guanais 2010). Most have undertaken reform efforts to improve the efficiency of their health expenditures while working to meet citizens' growing expectations about health care quality, as Colombia has done (Echeverry-López and Borrero-Ramírez 2015).

With the aim of contributing to the design of evidence-based health policies in LAC, giving special consideration to patient or health service user perspectives, between 2012 and 2014 the Inter-American Development Bank carried out the Primary Care Access, Experience and Coordination Survey in Latin America and the Caribbean, in adult populations in Colombia, Mexico, Brazil, El Salvador, Panama and Jamaica. In 2016, the data generated by the survey were used to produce studies on health systems in LAC, which were subsequently published in the international scientific literature. These studies addressed the following topics: the association between attributes of patient-centered primary care and the perception of good health care quality in Brazil, Colombia, Mexico and El Salvador (Dobova *et al.* 2016); gaps in primary care and health system performance in six LAC countries (Macinko *et al.* 2016); and determinants of public perception of the need for fundamental changes in LAC health care systems (Pérez-Cuevas, 2017). However, until now, the full results of the survey from the six countries had not yet been published or analyzed in detail, nor had the LAC results been compared with those of high-income countries.

Thus, this book aims to describe the conceptual framework and methodology of the survey, to present the detailed results of the survey for each of the six countries, and to offer an analysis of the determinants of public perception of the health care system and the quality of primary care. The results were compared to those of 11 other high-income Organization for Economic Cooperation and Development (OECD) countries: Australia, Canada, France, Germany, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom, and the United States. We hope that the results presented in this book will

contribute to bridging the information gap in LAC and will stimulate additional analyses that indicate how the patient's perspective can be used to strengthen primary health care within the context of universal health coverage and to improve health systems in the region.

The two-fold challenge of health systems

Health systems in the LAC region currently face the two-fold challenge of responding to demographic and epidemiological pressures in a context of increasing citizen expectations. The first challenge—demographic pressure—is not unique to the region and has been widely documented in the literature (Grover 2014). The declining fertility rate and constantly increasing life expectancy (currently an average of 75 years for the region) have led to the demographic transition, which implies an inherent process of population aging. In fact, projections suggest that, beginning in 2015, the over-60 age group will have the highest growth rate (ECLAC 2017). In LAC, it is estimated that this age group will grow from 9.7% of the population in 2010 to 25.4% in 2050, when there will be more than 200 million older adults in the region, a figure equivalent to Brazil's total current population. In Chile and Costa Rica, more than 30% of the population will be over age 60 in 2050.

Epidemiological pressure refers to a shift in the morbidity and mortality profile, in which mortality due to infectious and maternal-child diseases declines, while non-communicable chronic diseases (NCDs) become the leading causes of

morbidity and mortality. Thus, the current LAC epidemiological profile is characterized by the following:

- the rapid growth of morbidity and mortality due to chronic non-communicable diseases, resulting from the demographic transition, as well as growing exposure to risk factors, such as sedentary lifestyle, consumption of high-calorie diets, and elevated serum cholesterol levels and blood pressure, among others (Rubinstein *et al.* 2015, DiCesare *et al.* 2013);
- an unfinished agenda to reduce mortality due to infectious and maternal-child diseases, characterized by maternal and child health indicators in the region's poorest population that, despite the progress made in the last 15 years (Sacks *et al.* 2017), still lag behind international standards (Zulfiqar *et al.* 2013). Add to that a high prevalence of neglected tropical diseases, the result of unsanitary conditions, as well as large endemic foci of diseases with recurrent seasonal outbreaks (Hotez 2013); and
- the persistence of high levels of violence and accidents, especially among the young, economically active population (Auger *et al.* 2016).

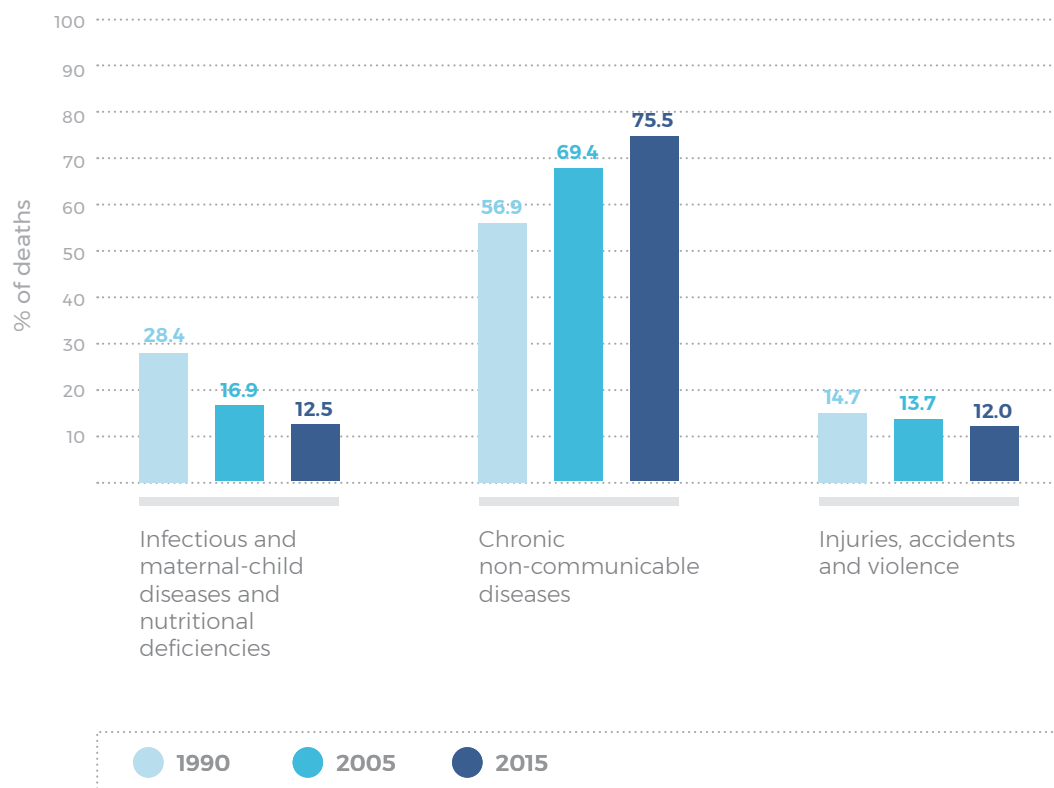
The following figures illustrate these trends. The graph in figure 1.1 shows the change in mortality pattern in LAC in 1990, 2005 and 2015, according to the three major groups of causes identified above, while the graph in figure 1.2 shows the burden of disease in LAC in 1990, 2005 and 2015, expressed in disability-adjusted life years (DALYs).

The poorest populations are the most affected by this epidemiological pattern;

given that they face the most unfavorable social conditions, the poor have greater exposure to risk factors and less access to health services (DiCesare *et al.* 2013). Unlike in other parts of the world, the demographic and epidemiological transitions in LAC occurred swiftly and concurrently (Dmytraczenko and Almeida 2015), thus representing a challenge for the region's health systems, as they must offer services that allow them to treat the wide spectrum of illnesses simultaneously affecting the population. Comorbidity (the simultaneous presence of two diseases in a single patient) and multimorbidity (the presence of multiple diseases in a single patient) have been associated with low socioeconomic status in low- and middle-income countries, especially in the context of population aging (Afshar *et al.* 2016). Several studies have demonstrated the particularly complex challenges of multimorbidity in the LAC region, in addition to the increase in NCDs and the persistence of infectious diseases in disadvantaged populations (Valenzuela-Jiménez *et al.* 2017; Olivares *et al.* 2017; Pereira Nunes *et al.* 2015; Arokiasamy *et al.* 2015; Lee *et al.* 2015).

The increased prevalence of NCDs should be associated with a rise in demand for medical care services, including timely detection, diagnosis, treatment and rehabilitation for each NCD. By their very nature, chronic diseases require treatment and ongoing follow-up for years or even decades, and they have complex complications that demand technology and specialized personnel to be treated, considerably increasing the costs of care. Technological development in the treatment of chronic diseases leads to a frequent introduction of new presentations of long-term medications, with incremental innovations that, in turn,

Figure 1.1. Distribution of causes of death in LAC (% of total deaths by groups of causes in 1990, 2005 and 2015).



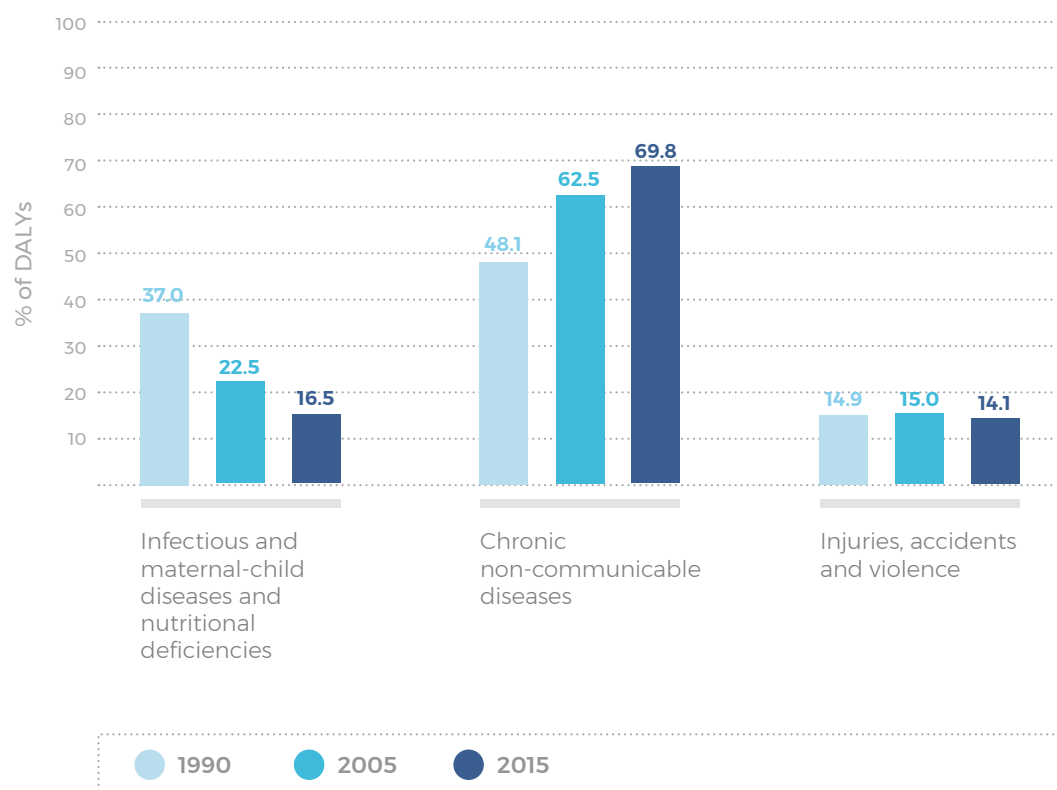
Source: Developed by the authors based on data from the Institute for Health Metrics and Evaluation (IHME) (2016).

are associated with increased costs that are disproportionate to the increase in treatment effectiveness (Arredondo 2017). Such is the case of successive generations of antihypertensive, antilipidemic and antidepressant drugs. In addition, the frequency of degenerative diseases (e.g., osteoarthritis, cataracts, dementia, among others) increases proportionally with age. Most are incapacitating and make those affected dependent on the care of others, thus requiring health care networks and specialty care. The current average health expenditure for people over age 60 in

LAC is 17%, and according to available projections, this figure will gradually increase to represent 53% of total health expenditure over the next five decades (CELADE 2014).

At the same time that they must respond to demographic and epidemiological pressures, health systems must meet a second challenge: moving toward universal health coverage in a context of increasing public expectations. Since the end of the 20th century, the trend toward universal health coverage

Figure 1.2. Burden of disease in LAC (% of total DALYs by groups of causes in 1990, 2005 and 2015).



Source: Developed by the authors based on data from the Institute for Health Metrics and Evaluation (IHME) (2016).

has prompted the adoption of public policies—especially in low- and middle-income countries—with the goal of offering financial protection and access to health care services for the entire population (Giedion *et al.* 2013), based, to a greater or lesser extent, on social principles of redistribution, equity and the recognition of health as a human and constitutional right. Although the concept of universal coverage is hardly new—in fact, several high-income countries have health systems that have offered coverage to their entire population for decades—in 2015, its

relevance to the international development agenda was legitimized by its inclusion as one of the targets of the Sustainable Development Goals (SDGs) (UN 2015), as indicated in box 1.1.

In LAC, since the 1980s, several countries have implemented various social reforms, taking advantage of a context of emerging democratization, economic growth and social stability. In the health sector, these reforms were aimed at expanding coverage, mainly among the poorest sectors, while seeking to reduce out-of-

pocket expenses and impoverishment, avoid catastrophic spending, improve health indicators, and bridge gaps between different social sectors (Knaul *et al.* 2012). By and large, health reforms related to universal coverage in LAC have consisted of enrolling or offering different health coverage schemes to groups that previously lacked coverage. Countries have adopted a variety of coverage models, financing methods, and service delivery mechanisms. Table 1.1 shows the characteristics of the UHC systems in use in the LAC countries included in this study.

Health systems in LAC are characterized by fragmentation, with both public and private health insurance schemes coexisting with social security. Among the six countries studied, Brazil and Jamaica have national health systems with financing based on general taxes (also known as the Beveridge model), while Colombia, El Salvador, Mexico and Panama have mixed health systems that are partly based on the concept of social security or insurance, in which financing depends on payroll contributions (also known as the Bismarck model), but also have non-contributory subsystems (Titelman *et al.* 2014, Levy and Schady 2013, Van der Zee and Kroneman 2007). All six countries have a private health insurance market with voluntary enrollment, with plans that are typically purchased in addition to public coverage (Giedion 2010).

Beyond financing, service delivery and coverage models, how countries select and formulate their benefit plans—that is, the procedures and technologies they choose to include in public financing—as well as how they establish their health priorities varies significantly. The lack of a systematic approach to choosing the interventions or benefits in a health package, together with the persistence of fragmented health systems, may have a result that is ineffective or that contributes little to improving the health status of the population (Giedion *et al.* 2014). In this context, the process of coverage expansion, in addition to being little studied and understood, is highly politicized (Horton and Das 2014).

By itself, an increase in health coverage does not guarantee a reduction in inequalities between different social groups, nor does it guarantee effective access to services. In fragmented health systems, multiple types of coverage offer different services; therefore, the care and guaranteed benefits received by users depend upon the plan in which they are enrolled. There are considerable gaps in effective coverage among social groups, some of which have been historically marginalized and have had less access to public services and social benefits, such as the poor, indigenous and Afro-descendant peoples, those living in rural or remote areas, and vulnerable populations (Carrasquilla Gutiérrez 2010).

Box 1.1. Universal health coverage target in the Sustainable Development Goals.

Goal 3: “Ensure healthy lives and promote well-being for all at all ages.” Target 3.8: “Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.” (UN 2015)

Table 1.1. Public financing, provision and coverage of health care services in participating countries.

COUNTRY	PUBLIC FINANCING	PUBLIC PROVISION	PUBLIC COVERAGE *
Brazil	General taxation; subsidies for private coverage through tax exemptions	Federal State Municipal	SUS: 100%
Colombia	General taxation; mandatory payroll contributions from formal workers	Competition among multiple providers	Subsidized scheme: 47.6% Contributory scheme: 42.3%
El Salvador	Voluntary and mandatory coverage; general taxation	Fragmented by coverage type	MINSAL: 72% ISSS: 25.7% ISBM and others: 2.3%
Jamaica	General taxation	Regional health authorities	Ministry of Health: 100%
Mexico **	General taxation; mandatory payroll contributions from formal workers	Fragmented by coverage type	Seguro Popular: 45.01% IMSS: 50.95% ISSSTE: 10.64% SEDENA and others: 2.77%
Panama	General taxation; mandatory payroll contributions from formal workers	Fragmented by coverage type	Social Security Fund: 80% MINSA: 20%

Notes:

*Percentage of the total population, unless otherwise specified.

**The coverage total may exceed 100%, as a portion of the population has double coverage.

Sources: Brazil: Marques *et al.* (2016); National Regulatory Agency for Private Health Insurance and Plans (2017). Colombia: MSPS (2016a, 2012). El Salvador: Ministry of Health of El Salvador (2016); Salvadoran Social Security Institute (2016); Acosta *et al.* (2011); General Directorate of Statistics and Census of El Salvador (2016). Jamaica: World Bank (2013); Planning Institute of Jamaica (2012). Mexico: Office of the President (2016); Ministry of Health of Mexico (2013). Panama: Social Security Fund (2010).

These gaps are reflected in the considerable differences that health indicators reveal within the same country. For example, in 2015, under-five mortality in LAC was three times higher in the lowest income quintile than in the highest income quintile (UNICEF 2016). Among the indigenous populations of Brazil, Colombia, Peru

and Venezuela, infant mortality rates are twice as high as the national parameter (Anderson *et al.* 2016). In some countries, fees or co-payments—even if they are very low or proportional to income—continue to be a barrier to health care access. In fact, a study of 12 LAC countries found that households with children and elderly

people are at the greatest risk of incurring catastrophic expenditure (Knaul *et al.* 2011).

The World Health Organization (WHO) uses three variables to measure the expansion of universal coverage: the increase in enrollment (people with health coverage), the extent of benefits, and the proportion of expenses that are actually covered by public resources (WHO 2010). It can be said that, in LAC, there has been progress in enrollment and in the determination of the benefits that universal coverage programs propose (Atun *et al.* 2014). Furthermore, in recent decades, all countries have increased spending on health. Alternatively, effective coverage refers to the fraction of health gain that the system could provide with the services it currently offers. To measure effective coverage, data on utilization, need and the quality of care are required; however, there is a lack of information regarding the quality of health services (Sepúlveda 2013). In this sense, regardless of the type of financing, public health systems in LAC have difficulty offering high-quality services for the following reasons: (a) a lack of culture of health care quality assessment in most countries; (b) deficiencies in human resources, structure and supplies available to meet the demand; and (c) budget pressures, which frequently interfere with health financing, that, in turn, often depends on the country's economic stability (Heredia *et al.* 2014).

In other words, in order to obtain better health results in the population, it is required that the detected needs be met, that the services be used, but also that they be of adequate quality. In fact, these three factors are highly interrelated. However, there is a very wide gap in most middle- and low-income countries in relation to quality assessment. The lack of unification

in the technical criteria on the definition of what it is and how it should be measured is due to the lack of systematic collection of information about it, Manichean views about the parameters that reflect the quality of care, and the almost universal omission of the patients' perspective (Kruk *et al.* 2017), even though they are the *raison d'être* of the health system.

An important aspect of the movement in favor of universal health coverage is the context of increasing citizen expectations, expressed through social movements and protests for better health services. On the one hand, the literature records the mobilization of civil society for the guarantee of the right to health in various LAC countries (Echeverry-López and Borrero-Ramírez 2015; Paiva *et al.* 2014; Gomes-Temporão and Faria 2014) and other regions (Matos and Serapioni 2017). On the other hand, WHO had already established since 2000 the concept of responsiveness of health systems to citizen expectations as one of its dimensions for assessing the performance of health systems. In this way, the concept of the patient experience is expanded to include direct contact between the health professional and the patient, up to the interaction between the health system and the population (Röttger *et al.* 2014; Murray and Evans 2003). According to Papanicolas and Smith (2013), the concept of responsiveness "captures dimensions of the health system concerned with patients' interactions with the health-care system, such as the health system's respect for patient dignity, autonomy and prompt service, as well as ensuring good communication, access to social support during care, quality of basic services and choice of provider." More recently, WHO has been promoting the concept of integrated health services centered on people, as a way to put the emphasis on people, instead of

diseases, as the fundamental axes of health systems (WHO 2016).

Therefore, users' perception of the health system should be an integral part of the quality assessment of the systems, since as direct recipients of the services, they can provide valuable information on specific aspects to improve, which could be reflected in more effective health spending. In this way, not only should access to public coverage be part of the route to universal coverage, but also the improvement in the quality of services, taking into account the perspective of users.

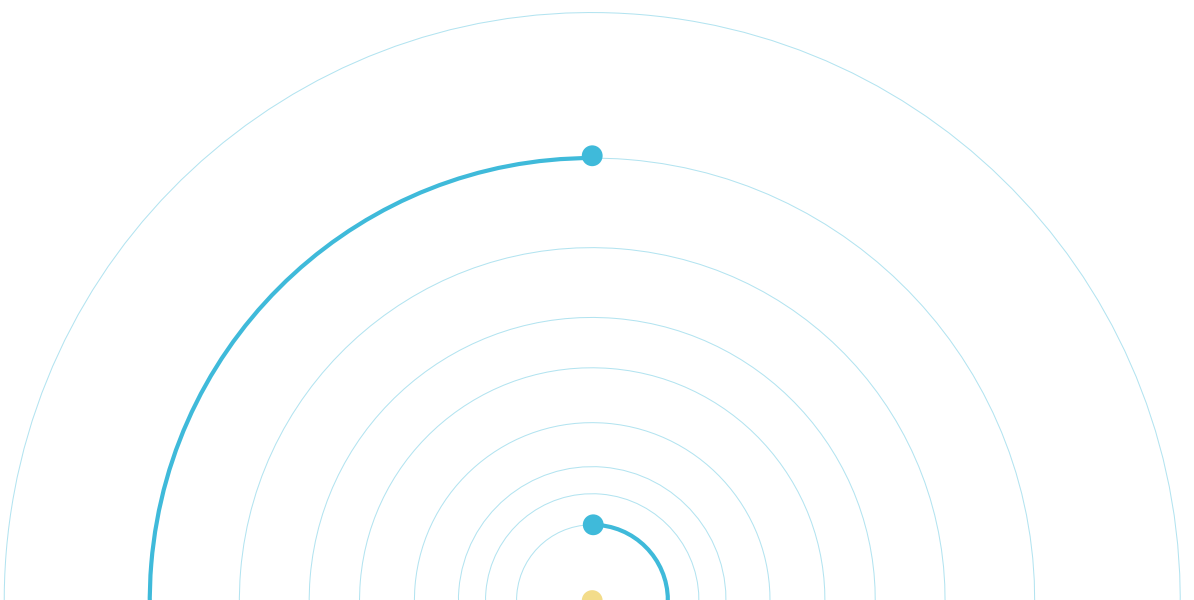
A brief description of the chapters of the book

The rest of this book is organized as follows. **Chapter 2** presents the conceptual framework of the study and describes the methodological design of the Primary Care Access, Experience and Coordination Survey in Latin America and the Caribbean, conducted in Brazil, Colombia, El Salvador, Jamaica, Mexico and Panama. We discuss a PHC-based conceptual framework for the analysis of the results of the survey in the six countries. The background on which the survey is based and the challenges for its implementation within the context of LAC are discussed. A detailed description of the sample design, the structure of the questionnaire used, and data collection and analysis are offered. The intrinsic

limitations to the methodology of the study are also presented, as well as those that were observed during its implementation.

Chapters 3 through 8 are specific to each of the six countries studied in LAC, and they all have the same general structure. At the beginning of each chapter, the demographic and epidemiological context is described, as well as the characteristics of the health system of the country in question, including the local health system and the most relevant public policies. Likewise, we describe the way in which the PHC delivery is carried out and the different existing subsystems for health coverage. These chapters may interest readers looking for more specific, detailed information, depending on the context of each country.

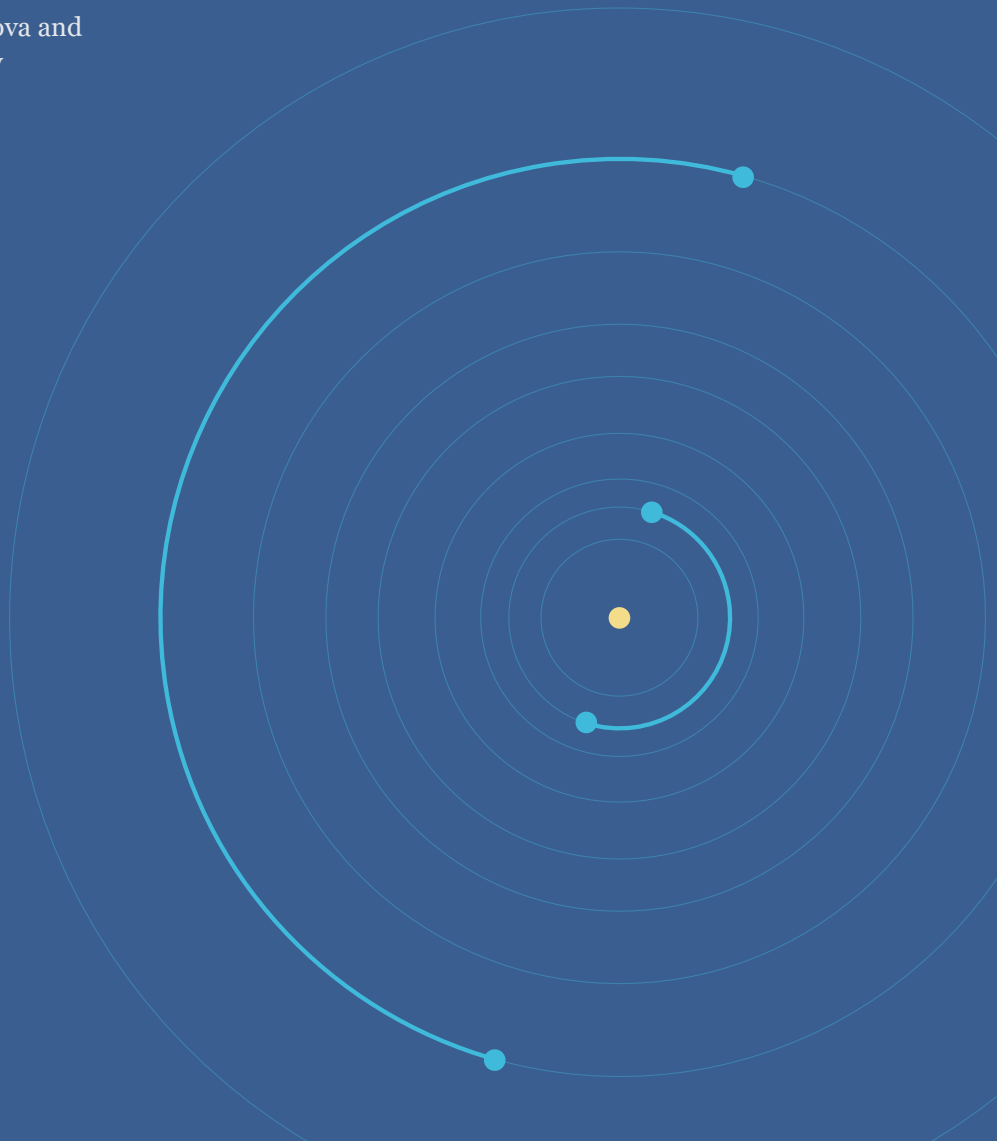
Chapter 9 concludes the book with a comparative analysis among the six LAC countries included in the survey and extends the comparison to 11 high-income OECD countries. In addition to a comparative description of the measures of access, experience and coordination in PHC in all 17 countries, the chapter undertakes a multivariate analysis of the extended sample. The objective is to verify to what extent the characteristics of PHC are linked to the perception of the need for fundamental changes in the health system and the quality of primary care that is perceived, expanding the previous analytical work published in the academic literature (Pérez-Cuevas 2017; Doubova 2016; Macinko *et al.* 2016; Macinko and Guanais 2015) and presenting unpublished results in a comparative perspective between LAC and OECD countries.



Primary Health Care: Conceptual Framework and Study Methodology

2

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Primary health care: a conceptual framework for the study

The importance of PHC for public health and the role it plays in allowing health care access to the population are not new concepts. The Declaration of Alma-Ata of 1978, adopted at the International Conference on Primary Health Care, held in the city of Almaty (formerly known as Alma-Ata), contains the most famous definition of PHC (WHO 1978), whose main elements remain current (WHO 2008).

During the first years of the 21st century, renewed attention has been given to PHC, along with a movement in favor of universal health coverage. In 2007, during the International Conference on Health for Development, the importance of PHC to achieve the Millennium Development Goals related to the issue was recognized. Subsequently, the Pan American Health Organization (PAHO) in 2007 (PAHO 2007), and the WHO in 2008 (WHO 2008) published “map” documents in this regard. Currently, it is considered that a strengthened PHC system is an essential requirement to achieve Goal 3 of Sustainable Development, which seeks to “guarantee a healthy life and promote well-being for all at all ages” (Hone 2017; Pettigrew *et al.* 2015).

Due to its essential characteristics, PHC has great potential to improve the population health, and can be an effective, coordinated and sustainable strategy to

Box 2.1. Definition of primary health care in the Declaration of Alma-Ata.

“Primary health care is essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. It forms an integral part both of the country’s health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family and community with the national health system bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process.” (WHO 1978)

provide health services to the majority of the population, face the challenges of the health system, and improve equity. The complexity of PHC, the relationship between its strengthening and that of the health system, its relevance as an essential component of health services, and the evidence supporting the positive impact of PHC on the health of the population were studied by Starfield (1998), who described the following essential characteristics:

- **Comprehensiveness.** It refers to the availability and provision of a wide range of services to address a broad variety of health problems. The comprehensive approach of PHC allows it to have a greater impact, since it includes health promotion services, timely detection, prevention of diseases and complications. In addition, the treatment of some acute diseases is included, as well as the monitoring of chronic diseases or of specific and critical stages of the life cycle (e.g., pregnancy, growth and development). Comprehensiveness is an important characteristic of primary care because

it avoids unnecessary referrals to specialists and duplication of laboratory exams, which reduces avoidable costs.

- **Person-, family- and community-centered care.** PHC must be in close proximity with families and the community. It allows for continuity of care, throughout the life cycle of the person, according to their specific needs, and not only when they have some disease, illness or injury. PHC provides person-centered care, which leads to a better understanding of the social, family and community context in which individuals are embedded, which also affects their health over time. Contrary to what happens in specialty or hospital care, in which the approach is a specific disease or condition, PHC considers the individual as part of a family and a community, within its social context, and adequately correlates the needs of patients with the resources available in health systems, facilitating their capacity to adapt to new circumstances.

- **Coordination.** PHC must coordinate the health care of the population, helping patients navigate the health system and different service providers, communicating effectively with the other levels of care. It interacts not only with the different levels of attention within the system, but also with services from different sectors outside the health system, to guarantee that the needs of the population are met. The goal is to achieve the connection between patients, family, caregivers, consultations and services, to ensure that patients receive adequate care for their health problems and personal and community development. For this, it requires qualified health teams: doctors, nurses, dentists, community health workers, psychologists, among others, who have the tools to interact with other sectors when necessary.
- **Longitudinality.** The population clearly identifies a primary care provider as its main source of care over time. This provider should be the first point of contact with the health system. Similarly, the regular health provider can easily identify the population in their charge. That is, the PHC documents the health status of a person over time. Given that there is a better understanding of the personal, family and social context of the users, healthcare is more effective, as it allows for improved recognition of problems and specific needs and for more precise diagnoses. Likewise, there is a mutual consensus between the user and provider regarding treatment, since patients are considered to be active participants in making decisions about their own health and in following up with recommendations, which results in improved adherence to treatments, thereby reducing costs due to recurrence or complications.
- **Accessibility and first point of contact.** PHC should be the patient's first point of contact with the health system. In order to adequately fulfill this role, geographic, financial, organizational, administrative, socio-cultural or gender barriers must be removed to ensure effective access. Secondly, PHC must have the capacity to solve most of the health problems that the population presents. Being the first point of contact, its role is paramount, since it allows health care staff to distinguish between those patients whose problems can be addressed at the first level from those who require other types of care.

Based on this conceptual framework, in the last two decades there has been a renewed interest in strengthening PHC and integrated healthcare networks as strategies to overcome the challenges that health systems face. Empirical studies comparing the degree of advancement of PHC in health systems among different countries found that systems that achieve lower rates of premature mortality and a better health status are those whose care networks have a strong primary health care orientation (Starfield *et al.* 2005; Macinko *et al.* 2003). In recent years, more empirical evidence has emerged, and several studies have focused their efforts on generating evidence on the different aspects and dimensions of PHC, adapted from the initial vision of Starfield (1998).

More recently, in the United States, the patient-centered medical home model (PCMH) has been promoted by the Agency of Healthcare Research and Quality (AHRQ) as a strategy to improve health care by transforming the organization and delivery

of services in PHC (AHRQ 2017). PCMH has five characteristics, very similar to the model originally proposed by Starfield (1998): (1) comprehensive care, (2) patient-centered care, (3) coordinated care, (4) accessible services, and (5) quality and safety. There is evidence that the PCMH model is associated with improvements in the experience of the patient and health personnel, the increase in the use of preventive services, and the reduction in the utilization of the emergency room (Jackson *et al.* 2013). Likewise, the set of studies dealing with experiences of implementation of PCMH in primary care has increased (Hall *et al.* 2017; Weissman *et al.* 2017; Katz *et al.* 2017).

Because the concept of PCMH is more widespread in the United States, in this publication we use the broader definition of person-centered PHC to refer to a primary care model that offers comprehensive, patient-centered, coordinated care, with accessible services, and with quality and safety. Table 2.1 presents a selection of evidence on the organization and effectiveness of those aspects or dimensions of patient-centered PHC.

Comprehensiveness refers to the ability of the PHC to solve most of the population's health problems. Despite common belief and practice, it has not been proven that the care that a specialist can provide to a specific organ or single condition can provide the benefits offered by the PHC (Friedberg *et al.* 2010). There is increasing evidence that primary care can effectively and efficiently handle many complex health problems that are typically treated by specialists (Rich *et al.* 2012). Examples of these conditions are diabetes, hypertension, coronary artery disease (Fortin *et al.* 2016), and mental disorders (Adaji *et al.* 2017), as well as an increasingly important role in cancer screening (Rubin *et al.* 2015).

Patient-centered care and the patient experience allow care to be personalized according to the needs identified, favoring interdisciplinary collaboration without increasing costs (Counsell *et al.* 2007). The interventions offered by the PHC, such as health education, inclusion in nutritional programs and the promotion of social participation, contribute to an improvement in people's health status (Mosquera *et al.* 2012). PHC teams are located and work within the communities, which allows them to identify and address the social determinants of health and adapt services to improve their quality. For example, in Sweden a study found that patients perceived that their ethnicity and mental health status influenced the quality of care they received, and they considered that being served by professionals who spoke the community language was a way of providing more equitable care (Akhavan and Tillgren 2015). Likewise, an association has been detected between the self-perception of health and the quality of PHC services (Wang *et al.*, 2015).

Evidence shows that when people have access to **longitudinal and coordinated care**—in other words, they recognize PHC as their regular provider of health services—they require fewer consultations with specialists and fewer hospitalizations (White *et al.* 2016; Hansen *et al.* 2013; Chenore *et al.* 2013) and they make fewer unnecessary visits to emergency services for routine care or problems that can be resolved at the primary level of care (Kringos *et al.* 2013). Continuity of care has been inversely associated with mortality (Leleu and Minvielle 2013), especially in patients with a recent diagnosis of diabetes, hypertension or hypercholesterolemia

Table 2.1. Evidence on the characteristics of patient-centered PHC.

	REFERENCES	EVIDENCE
COMPREHENSIVE CARE	Adaji <i>et al.</i> 2017 Fortin <i>et al.</i> 2016 Rubin <i>et al.</i> 2015 Rich <i>et al.</i> 2012 Friedberg, 2010	PHC that provides comprehensive care is able to improve health outcomes, as well as to solve most users' problems
PATIENT-CENTERED	Counsell <i>et al.</i> 2007 Akhavan and Tillgren, 2015 DiCesare <i>et al.</i> 2013 Wang <i>et al.</i> 2015 Chetty <i>et al.</i> 2016	PHC focused on the patient and on the characteristics of the community it serves, obtaining better health outcomes
COORDINATED CARE	Chaiyachati <i>et al.</i> 2014 White <i>et al.</i> 2016 Hansen <i>et al.</i> 2013 Chenore <i>et al.</i> 2013 Tracy <i>et al.</i> 2013 Hoertel <i>et al.</i> 2014 Shin <i>et al.</i> 2014 Leleu y Minvielle, 2013 Rogers <i>et al.</i> 2014 Barker <i>et al.</i> 2017 Du <i>et al.</i> 2015	PHC that is the regular provider of a defined population and that helps coordinate care generates less use of hospital, specialty and emergency services, in addition to having lower mortality in recently diagnosed patients
ACCESS AND FIRST CONTACT	Kringos <i>et al.</i> 2013 Macinko and Guanais, 2015 Davy <i>et al.</i> 2016 Pandhi <i>et al.</i> 2016	PHC is patients' first point of contact with the health system, with fewer geographical, financial and organizational barriers
QUALITY AND SAFETY	Paustian <i>et al.</i> 2014 Markovitz <i>et al.</i> 2015 Sandy <i>et al.</i> 2015	The implementation of the patient-centered PHC model is associated with improvements in quality and safety indicators

Source: Developed by the authors.

(Shin *et al.* 2014) and unnecessary hospitalizations (Barker *et al.* 2017). Likewise, the expansion of PHC has also been associated with a reduction in unnecessary hospitalizations (Macinko *et al.* 2011). In this way, PHC helps alleviate unnecessary work overload in other levels of care, as it solves a wide range of problems on an outpatient basis.

Access and the first point of contact refer to the model by which the population reaches PHC: access is facilitated by reduced geographical, financial and organizational barriers and serves as patients' first point of contact with the health system. Some cross-country studies find that health systems with a strong primary care orientation have lower

barriers to access (Kringos *et al.* 2013; Macinko and Guanais 2015). Similarly, studies at the individual level show that PHC as the first point of contact manages to improve access and use of health services by specific populations. The utilization of health services according to personality types has been studied and it was found that when there is access to primary care as the first point of contact, people with a lower level of agreeableness gain better access to preventive services (Pandhi *et al.* 2016). The implementation of PHC services in indigenous communities has been shown as a way to overcome the barriers in access to health of these populations (Davy *et al.* 2016).

Finally, some evidence shows that when the requirements for the implementation of patient-centered PHC are met, better results are obtained in terms of the **quality and safety of care**. Studies have identified better results in terms of population screening and preventive measures for cancer (Markovitz *et al.* 2015) as well as better quality, measured by aggregated scores (Sandy *et al.* 2015; Paustian *et al.* 2014).

Another dimension that has been the subject of several recent empirical tests is the ability of the PHC to function as an effective strategy to face the challenge of NCDs. This attribute becomes even more relevant in the current epidemiological context of LAC, in which the strong growth of these diseases coexists with the persistence of infectious diseases in less-favored populations. At the same time, this increases the incidence of complex cases of multimorbidity, especially in adults over age 60 (Pereira Nunes *et al.* 2015; Arokiasamy *et al.* 2015). In this scenario, the strengthening of PHC constitutes an especially promising

strategy (Mercer *et al.* 2016). On the other hand, the high prevalence and incidence of chronic diseases in the region also implies a high financial burden for the countries (Anauati *et al.* 2015; Arredondo and Aviles 2015). A study in low- and middle-income countries, which included Brazil, Argentina, Mexico and Colombia, estimated a loss in economic output of US\$ 85 billion due to diseases, cardiovascular accidents and diabetes from 2006 to 2015 (Abegunde *et al.* 2007).

In this context, the universal implementation of a high-quality PHC that is physically and financially accessible has been considered one of the key actions to face NCDs and reduce existing inequities among the populations affected by them, by influencing the risk factors and provide diagnosis and timely treatment (DiCesare *et al.* 2013). Some PHC-based interventions in patients with multimorbidity residing in socioeconomically disadvantaged areas have shown a positive impact on patients' quality of life (Mercer *et al.* 2016). Other personalized prevention actions for NCDs, including mental health problems within the scope of PHC, have proven to be cost-effective (Grunfeld *et al.* 2013). An adequate implementation of PHC, with an integration into the health system, is capable of providing primary and secondary prevention in an adequate manner for all types of chronic diseases in a broader manner. There is sufficient evidence on the positive effects of PHC to treat patients with cancer in all stages of the disease, from prevention to palliative care (Rubin *et al.* 2015). The provision of an integrated PHC model has been key in guiding the use of patient health services and reducing the disparity in the care of older adults (Shi *et al.* 2015).

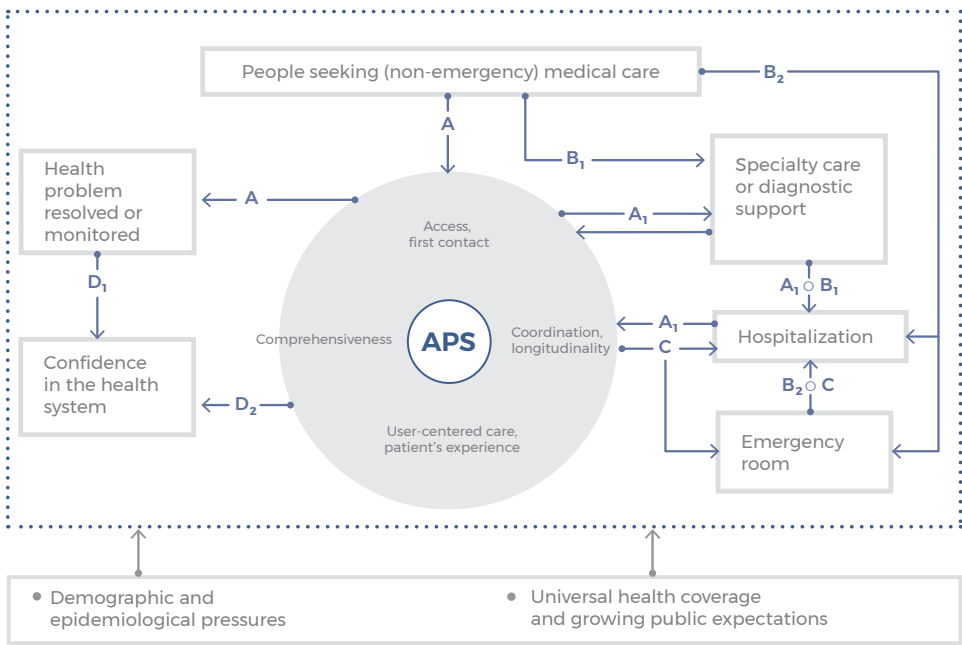
Figure 2.1 below proposes the conceptual framework for the study based on a review of the context and challenges of PHC in LAC countries, the concepts and evidence of PHC and the design principles for user-centered public policy.

In the figure, LAC health systems are inserted in a context of demographic and epidemiological pressures, with an increase in NCDs and political and social movements that demand universal health coverage

with growing expectations about the quality of services. All this generates challenges for decision makers, service providers, managers and health professionals. At the level of the organization of health services, an individual seeking care for a non-emergency condition will ideally consult with their primary care provider first and resolve their health problem (sequence A).

In a health system in which primary care is the first point of contact, the

Figure 2.1. Conceptual framework proposed for the study.



A = primary care is the first point of contact with the health system; the individual is treated care at the primary care level

A₁ = primary care is the first point of contact with the health system; the individual is referred by primary care

B₁ | B₂ = primary care is not the first point of contact with the health system

C = primary care is not able to solve the problem (due to lack of access, capacity or quality)

D₁ | D₂ = primary care influences individuals' view of and confidence in the health system

Source: Developed by the authors based on an adaptation of Macinko, Dourado and Guanais (2011).

A sequence is expected to dominate, especially considering studies suggesting that good quality primary care can solve most health care needs (Rao and Pilot 2014; Bindman *et al.* 2007; Doherty and Govender 2004; Caminal *et al.* 2004). In sequence A1, individuals access primary care as the first point of contact and then are sent from primary care to specialty or diagnostic care. Therefore, primary care plays an important role of first contact and coordination of care, and patients—together with the information generated during their care with specialists—return to the primary care provider. It is expected that when sequences A and A1 are followed, the rates of avoidable hospitalization, unnecessary use of the emergency room, and unnecessary procedures are low.

By contrast, sequences B1 and B2 represent patterns of use in which primary care is not easily accessible (due to geographic, financial, organizational or other barriers) or does not fulfill its function as first contact care. In sequence B1, patients go directly to specialty providers without consulting the primary care level. In sequence B2, they go directly to emergency rooms or hospitals to receive care that can be provided at the primary care level. Sequence C represents another suboptimal pathway that can lead to avoidable hospitalizations or excessive use of specialty services. In this scenario, patients visit their primary care provider but are immediately referred to the emergency room or hospital due to the following: (a) lack of prior access to primary care interventions, b) poor quality of primary care provided, or (c) the lack of capacity at the primary care level to treat what should be a controllable disease.

Another sequence of interest for decision makers, managers and professionals in

the health sector should be to what extent primary care impacts people's view of and confidence in health systems. Traditionally, it is suggested that confidence in the health system should be related to their ability to solve or control most of the health problems, represented by the D1 sequence. However, this study seeks to highlight the orientation of health systems to the user, emphasizing the aspects of person-centered care and, particularly, the experience of users with PHC. With this, it is proposed not only to measure and describe the access, coordination, resolution capacity and experience that the patient has with PHC in six LAC countries, but also to examine to what extent these characteristics are determinants of users' view of and confidence in health systems, represented in the figure by the sequence D2.

Survey methodology

The Commonwealth Fund's International Health Policy Surveys.

One of the pioneering international experiences in the measurement of health outcomes and experiences reported by users at the health system level utilized telephone surveys with random samples of adults. They were carried out in high-income countries, according to a common structure translated and adapted to the local context, and were conducted by the Commonwealth Fund, a think tank based in New York, United States, since 1998. In the version aimed at the general population, the International Health Policy Surveys (IHP) collect data from representative samples of citizens of several OECD countries and are repeated every three years in order to evaluate the effectiveness of the different systems in a series of

characteristics, from the perspective of the users (Osborn *et al.* 2016; Schoen *et al.* 2013; Schoen *et al.* 2010; Schoen *et al.* 2007; Schoen *et al.* 2004; Blendon *et al.* 2002; Schoen *et al.* 2000).

These surveys are supplemented in the following years with others from adults with chronic diseases and others from primary care providers in the same countries (Schoen *et al.* 2012; Schoen *et al.* 2011; Schoen *et al.* 2009; Schoen *et al.* 2006; Schoen *et al.* 2005; Blendon *et al.* 2004; Blendon *et al.* 2001). The most recent general population surveys took place in 2016, and the sample included 26,863 adults aged 18 and over in Australia, Canada, France, Germany, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom, and the United States (Osborn *et al.* 2016). The studies conducted by the Commonwealth Fund have been widely cited in the academic literature (Penm *et al.* 2017; Smith and Chalkidou 2017; Altin and Stock 2016; Nardin *et al.* 2016), and their results have influenced the discussion and decisions surrounding health-related public policies in several OECD countries (Van Loenen *et al.* 2016).

Adaptation of the Commonwealth Fund survey to the LAC context.

Considering the success of the Commonwealth Fund experience and the lack of empirical data applicable to the LAC context, between 2012 and 2014 the Inter-American Development Bank adapted the Commonwealth Fund questionnaire to the context of Colombia, Mexico, Brazil, El Salvador, Panama and Jamaica, with special emphasis on primary health care. In LAC, the six countries studied were chosen according to the magnitude of the health reforms, the

feasibility of applying the survey and the interest in including countries from each of the four administrative regions according to the IDB organization (Caribbean, Southern Cone, Central American Isthmus and Dominican Republic, and Andean Countries). The IDB team translated and adapted the questionnaires to the context of each country to ensure that the expressions used were appropriate to the local reality. The structure of the questionnaire and most of the questions included in the Primary Care Access, Experience and Coordination Survey in Latin America and the Caribbean are identical to those proposed by the Commonwealth Fund in its 2013 survey (Schoen *et al.* 2013).

Although the Commonwealth Fund survey was designed in a context of high-income OECD member countries, its design evolved over time from its initial version in 1998, to incorporate elements that are cross-cutting to health systems as diverse as those of the United States, the United Kingdom and Germany. For that reason, the most recent versions seek to evaluate elements of the health system that also have wide applicability to the challenges faced by health systems in the LAC region, such as access, coordination of care and patient experience (Schoen *et al.* 2007), out-of-pocket expenses (Schoen *et al.* 2010), wait times to receive primary care, use of emergency rooms and general vision of the health system (Schoen *et al.* 2013). In adapting to the context of LAC, we sought to maintain the comparability of the variables as much as possible, using similar texts in the preparation of the questions. However, some of the more specific elements of the health system in the United States, such as the time used to complete medical expense reimbursement forms, were eliminated or received less

attention in the version used in Latin America and the Caribbean.

In the context of LAC, and in comparison with high-income countries, the implementation of the survey also involved specific challenges in the context of the region, which is why particular strategies were designed to handle each of these methodological problems. For example, socioeconomic inequality and variation in access to a landline by socioeconomic level could potentially jeopardize the representativeness of the sample, especially among lower-income populations. Therefore, it was specified that the survey should also include mobile telephony in all countries, since the penetration of this communication channel has high levels in all socioeconomic strata in the region (WB, 2017).

Likewise, the variation in the educational level and in the capacity to understand the questions of the survey motivated the realization of previous tests with real interviewees in all the countries, which allowed to adapt and reformulate those questions that generated doubts during the preliminary stage. Due to the distrust and resistance of the respondents in providing personal information to unknown interviewers by telephone, an initial contact protocol was designed and the block of questions of a socioeconomic nature passed towards the end of the interview. Finally, the fragmentation in health systems and the existence of different user groups by type of coverage determined the inclusion of specific questions that would allow identifying this variation.

Before starting with the live interviews, informative meetings were held with the project supervisors and the managers

of the call centers. The purpose of these sessions was to review the objectives of the study, the specifications of the sample, the soft quota/demographic objectives for the weighting, the interviewer's notes and the respondent's eligibility, as well as to address any issue or concern that the supervisors or managers they may have had about the data collection process. Ten pre-test interviews were carried out to identify possible problems with the questionnaire, for example, difficulty in understanding the questions and response options, translations, duration of the interview, etc. Pre-test interviews were recorded to give the IDB the opportunity to stop, review parts of the interviews, and take notes, as needed.

Sample layout and characteristics of the interviews.

The data were collected through telephone interviews, including fixed and mobile telephone lines between random samples of adult populations in each country (over 18 years of age), which were contacted by random selection of telephone numbers. The final sample included 9,012 adults 18 years of age or older. The Harris Interactive/Nielsen polling firm was contracted to design the sampling strategy, to carry out the programming of the questionnaire in software to support the telephone interview, to train the interviewers, to conduct all the interviews, to collect the data, to verify the consistency and quality of the bases, calculate the sample weights and generate the databases, through a standardized protocol in all countries.

In each country, telephone interviews were conducted with a national sample of non-institutionalized adult population, taken from fixed and mobile residential telephone lists prepared by the Harris Interactive/

Nielsen surveyor and its associated companies in each country. Minimum quota goals were established by sex and age in geographic regions of the countries, used to monitor the representativeness of the samples compared to the latest available census surveys. Mobile and landline telephone numbers were included, which allowed for representative samples of both rural and urban populations. The interviews were conducted in Portuguese for Brazil, in English for Jamaica, and in Spanish for the remaining countries.

A specific sampling frame was designed for the six countries that sought to capture the representativeness of the national adult population (over 18 years of age), according to established specifications to achieve a margin of error of +/- 3.5% and a 95% confidence interval, which resulted in a minimum sample of 1,500 observations per country. For this study, a minimum response rate of 20% was also specified, commonly used in opinion survey studies (Schoen *et al.* 2013), by using the following calculation formula:

The study was carried out in the six countries according to these specifications. Table 2.2 presents the sample disposition data below.

The number of completed interviews ranged from a low of 1,500 in El Salvador to a high of 1,514 in Panama, and overall response rates by country ranged from 29% in Colombia to 43.8% in El Salvador, meeting the specifications established a priori. The average duration of the interviews was a minimum of 20 minutes in Brazil and a maximum of 28 minutes in Jamaica.

Data collection was conducted through a computer-assisted telephone interview, using a platform accessible via web browser (computer-assisted telephone interviewing over web, or COW-CATI). The questionnaires were programmed into the system, along with algorithms that introduced, in real time, the following seven procedures to ensure the consistency and quality of the interviews and data recording: (a) a series of questions and answers; (b) skip patterns (e.g., the non-applicability of

$$\text{Response rate} = \frac{\text{Completed questionnaires}}{\left(\begin{array}{c} \text{available} \\ \text{sample} \end{array} - \left(\begin{array}{c} \text{non-working} \\ \text{numbers} \end{array} + \begin{array}{c} \text{business} \\ \text{numbers} \end{array} + \begin{array}{c} \text{ineligible} \\ < \text{age 18} \end{array} + \begin{array}{c} \text{refusals} \end{array} \right) \right)}$$

questions depending on the respondent’s age or sex); (c) question rotation; (d) range checks during data recording; (e) mathematical checks; (f) consistency checks; and (g) special editing procedures. COW systems reduce administrative error by eliminating the need for data entry,

since interviewers enter respondents’ answers directly into a computer during the interview. For questions with pre-coded answers, the system only allows responses within a specified range; for example, if a question has three possible response options, the COW system will only accept

Table 2.2. Sample disposition and characteristics of the interviews.

CHARACTERISTICS	BRAZIL	COLOMBIA	EL SALVADOR	JAMAICA	MEXICO	PANAMA
Loaded sample (n)	8,000	7,136	11,000	18,606	9,544	14,897
Available sample (n)	5,978	6,668	10,480	18,241	8,000	13,900
Total calls (n)	6,111	24,197	30,788	60,319	13,392	33,394
Non-working phone numbers (n)	1,217	498	2,906	8,943	809	3,757
Business numbers (n)	285	113	1,295	5	557	1,662
Ineligible—under 18 (n)	86	26	683	373	577	2,656
Refusal (n)	705	851	2,172	4,071	1,204	1,348
Completed interviews (n)	1,501	1,501	1,500	1,506	1,503	1,514
Response rate (%)	40.7	29.0	43.8	31.1	31.0	33.8
Average duration (minutes)	20	27	22	28	24	27

Source: Harris Interactive/Nielsen.

encoded responses corresponding to those options. All the data is compiled, and its internal consistency is verified.

Information about the place of residence, age, sex, socioeconomic status, education and household size was gathered with the goal of establishing target sample weights for the survey in each country. Then, a random iterative method (RIM) weighting procedure was used, which means that

the weights were applied iteratively for each individual variable included in the weighting (McNulty *et al.* 2016). This procedure seeks to guarantee that the distributions for each of the variables of interest closely reflect their targets. It is conducted by reducing non-response bias and correcting the differential non-response rate in different groups of variables of sample characteristics, using data from the most recent national

censuses of each country. After this iterative process—the RIM weighting—each respondent ends up with a single weight value. Individual weight values were subsequently standardized to limit outliers or any extreme weighting.

Structure of the questionnaire used

The questionnaire included between 90 and 98 questions (the exact number varied depending on the country) and its structure was evaluated so that it could be answered in an average time of 20 minutes, considering that the response pattern depends on the specific circumstances of each respondent. The questionnaire is divided into 11 sections, as described below:

- a. Introduction and basic data (five questions):** presentation, survey objectives and type of information that will be collected, age, sex and location of the respondent.
- b. Overview of the health system (three questions):** general opinion of the country's health system, confidence in receiving effective treatment and in being able to pay for necessary care.
- c. Primary care (27 questions):** utilization of primary care, type of provider, organizational and financial access barriers, wait time for an appointment, ease of care on nights and weekends, search for care in the same place, type of center usually used, length of contact with the regular place of care, participation of nurses and other health personnel in the care, forms of communication with the health center, channels for scheduling appointments, experience and interpersonal treatment during the consultation, help from primary care in the coordination of care with other levels, need for referral to other levels, rating of the care received in the regular place of care, numbers of doctors consulted.
- d. Specialty care (five questions):** use of specialty care, wait time for an appointment, flow of medical history between primary care and specialty care.
- e. Hospitalization and emergency room (10 questions):** need for scheduled or elective surgeries; wait time for a scheduled or elective surgery; hospitalization for one night or more; use of emergency room or rehospitalization after hospital discharge; support from the hospital in the coordination of care during the hospital discharge process; emergency room use in general; coordination of care during the discharge process from the emergency room; emergency room use due to a condition that could have been treated by primary care.
- f. Health coverage (2 questions):** type of coverage (public and/or private) and duration of current coverage type.
- g. Out-of-pocket expenses and medical bills (four questions):** total amount of out-of-pocket spending on medical care and prescription drugs; method of paying for treatments or services not covered by insurance; difficulties in paying medical bills or receiving reimbursement for medical expenses incurred.

- h. Use of prescription drugs (five questions):** number of prescription drugs, evaluation by the primary care physician of all prescription medications, explanation of the side effects of medications by the primary care physician, method of costing the medications prescribed and their availability.
- i. Health status (10 questions):** self-reported general health status, number of days that the patient did not feel good, previous diagnosis of arthritis, asthma or chronic obstructive pulmonary disease, cancer, depression or anxiety, diabetes, heart disease, hypertension, high cholesterol.
- j. Preventive care (13 questions):** checks and current status of blood pressure and blood glucose level, confidence in being able to handle chronic diseases, preventive check-ups for cervical cancer and breast cancer, check of cholesterol level, performance of routine medical exams, guidance on healthy lifestyles and eating.
- k. Socioeconomic status (between 6 and 14 questions):** level of education of the respondent and the head of the household, measures of socioeconomic status (vary by country), survey response method (landline or mobile phone).

The most important group of questions is focused on primary care, which allowed the measurement of the main conceptual dimensions of PHC—access and first contact, comprehensiveness, coordination and longitudinality, and patient-centered primary care. It also focuses on the use and experience of specialty care, emergency

room and hospitalization, and view of and confidence in the health system, as identified in the conceptual model of the previous chapter. The concept of patient-centered PHC was operationalized based on four criteria, as proposed by Schoen *et al.* (2007), which served as indicators to identify the presence of a patient-centered medical home (PCMH): (1) the patient has a regular place of primary care; (2) the patient's communication with the regular place of care during office hours is easy; (3) professionals in the regular place of care know the patient's history; and (4) the professionals in the regular place of care help the patient to coordinate his care.

Data analysis

In this book, the descriptive results for the six countries surveyed were weighted according to the sample's expansion factors at the national level. They are presented in chapters 3 through 8 in tables that aim to map the PHC experience in Brazil, Colombia, El Salvador, Jamaica, Mexico and Panama.¹

Taking into account the fragmentation of the health systems in the region (Bossert *et al.* 2014), as well as the potential differences in terms of access and quality among coverage subsystems, the results were reported in columns for four potential forms of coverage: uninsured; public or subsidized insurance—funded by general taxes and that includes the poorest people and informal workers; social or

¹ Chapter 9 of the book presents a comparative analysis between LAC and the OECD according to a specific methodology, which is explained in the chapter itself.

contributory insurance—predominantly financed by taxes on the payroll of formal workers; and private insurance, voluntarily acquired in private markets and financed mainly through the payment of premiums. In many countries, the existence of double or even triple coverage among the different forms is common, which generates problems for the development of comparative studies.

In order to preserve the comparability between the different coverage groups in each country, the descriptive statistics—except those that refer to the characteristics of the sample—were adjusted for risk for sex, age (five age groups, which were 18–25, 26–35, 36–45, 46–59, and 60 and over), educational level (primary or less, complete secondary, higher education), presence of chronic disease, and subjective perception of health status. Calculations of adjusted prevalence were made with the robust Poisson regression model (Chen *et al.* 2014), and the coefficients represent the prevalence rates. Estimates were made using the statistical analysis software Stata/SE version 14.2 (Statacorp 2015). The level of significance was set at 5% to determine if there is a statistically significant difference between the prevalence reported for each coverage group.

In order to standardize the analysis, those who did not have any type of coverage were categorized as “uninsured”; those who only have public coverage as “public insurance”; those who have social insurance but no additional voluntary private insurance as “social insurance”; and those with private coverage as “private insurance,” regardless of whether they have another type. Due to the variation in coverage rules in each country, the number of forms of coverage that exist

in each one varies (see chapter 1). Brazil and Jamaica, countries with health systems similar to the United Kingdom’s coverage model, which is independent of employment affiliation, have two categories: public insurance and private insurance. In Colombia, El Salvador and Panama, countries where employment affiliation determines the type of coverage, there are three categories: public insurance, social insurance and private insurance. In Mexico, in addition to these three categories, there is a group that reported that it does not have any type of health insurance, so an uninsured category was added.²

For each of the six countries included in the survey, all results were reported, according to the following sections: (1) sample characteristics and general perceptions about the health system, (2) barriers to access to services, (3) experience with the use of PHC and resolution capacity of services, (4) coordination of specialty care, hospitals and emergency services with primary care, and (5) discussion of results and corresponding conclusions. The operationalization of the variables included in the study is presented in detail below.

2 Two previous studies, which used the same data, were based on a different definition for the “uninsured” population (Pérez-Cuevas *et al.* 2017; Doubova *et al.* 2016), according to which 43.5% of the population in Jamaica and 43.7% of the population in El Salvador was considered uninsured. Because the present study makes a distinction between the concepts of non-contributory “public insurance” and contributory “social security,” it is considered that people from El Salvador who are not enrolled in social security are eligible for services provided by the Ministry of Health (see table 1.1 and chapter 5). In Jamaica, since the system is based on the model of the national health system, there is no contributory public insurance (see table 1.1 and chapter 6); therefore, the present study does not include the category “uninsured” for those two countries.

Characteristics of the sample and general perceptions about the health system.

This section describes the demographic and socioeconomic characteristics of the population studied, as well as participants' perceptions of their own health and the country's health system. Variables related to education and socioeconomic status, in particular, had to be adapted to each country's reality. The variable "education" was divided into three mutually exclusive categories, according to the definition in table 2.3 below.

For the remaining variables, the operationalization was identical in all the countries in the sample. Table 2.4 shows the definitions used for the variables of presence of chronic diseases, subjective perception of health status and perception and confidence in the health system.

Barriers to access services.

Barriers to access refer to data related to financial, transportation, and organizational obstacles, as well as those related to service delivery. Table 2.5 shows the definitions used for barrier variables.

Table 2.3. Standardization of educational level categories, by country.

COUNTRY	PRIMARY	SECONDARY	UNIVERSITY
Brazil	No education, basic 1 completed, basic 2 completed	Secondary completed, technical school completed	University completed, graduate studies
Colombia	None, preschool, primary	Secondary, technical/technological	University
El Salvador	None, special education, preschool, kindergarten, basic	Secondary	Higher education university studies, higher education non-university studies
Jamaica	Primary/preparatory, all-age school	Traditional secondary school, technical/vocational school	University, graduate studies
Mexico	No schooling, primary incomplete, primary completed	Secondary completed, commercial track, technical track, preparatory completed	Bachelor's degree completed, master's degree, doctorate
Panama	Preschool, primary, middle	Secondary, technical program	University studies

Table 2.4. Self-reported health status and overall views of the health system.

CATEGORIES	CHARACTERISTICS	DEFINITION OF THE VARIABLE
Health status	<ul style="list-style-type: none">• At least one chronic disease• Two or more chronic diseases	There is a previous diagnosis by a physician of arthritis, asthma, cancer, depression, diabetes mellitus, heart disease, hypertension, or high cholesterol levels.
	<ul style="list-style-type: none">• Low subjective perception of health status	The respondent's description of own health is fair or poor.
Perception of the health system	<ul style="list-style-type: none">• The system works quite well and only minor changes are needed to make it work better• Our health system has some positive aspects, but fundamental changes are needed to make it work better• There are so many problems in our health system that we must overhaul it completely	Affirmation that is closer to the respondent's overall opinion of the health system in his or her country.
Confidence	<ul style="list-style-type: none">• Confidence in receiving the most effective treatment, including medications and diagnostic tests	Respondent very confident or somewhat confident that he or she would receive treatment if suffering from a serious illness.

Experience with the use of PHC and resolution capacity of services.

The variables of the experience with the use of PHC and the resolution capacity of the services describe the user's perspective on his experience with PHC professionals, the use of health services and the presence of a patient-centered PHC model. Likewise, the results are described in relation to the use of PHC for prevention, detection and management of chronic diseases, including preventive consultations and exams and chronic disease management. Table 2.6 presents the definitions used for variables of use of PHC and table 2.7 shows

those that were used for the variables of resolution capacity of the services.

Coordination of specialty care, hospitals and emergency services with primary care.

The coordination of specialty care, hospitals and emergency services with primary care describes the results about the user's experience throughout the different levels of care. It also reveals his experience with access to specialty care, his impression of the coordination between PHC and specialty care, and his experience with regard to hospitalization and the use of emergency services. Table 2.8 presents

Table 2.5. Financial, transportation and organizational barriers.

CATEGORIES	CHARACTERISTICS	DEFINITION OF THE VARIABLE
Financial barriers	<ul style="list-style-type: none"> Confidence in being able to pay for a treatment if necessary 	Respondent very confident or somewhat confident that he would receive treatment if he suffered a serious illness.
	<ul style="list-style-type: none"> Had medical problems, but did not go to a doctor because of the cost Did not go for an exam, treatment or follow-up visit due to cost 	In the last 12 months, there was some time when the respondent failed to seek care, an exam or treatment due to the cost.
	Had out-of-pocket costs: <ul style="list-style-type: none"> Any amount > US\$ 200 > US\$ 500 	In the last 12 months, what was the amount that the respondent and his family spent in cash (or out of pocket) for medical treatments or services that were not covered by health insurance or public care, converted to purchasing power parity (PPP) US dollars?
	<ul style="list-style-type: none"> Had serious problems paying out-of-pocket expenses 	In the last 12 months, there was some time when the respondent was unable to pay his medical bills.
Transportation barriers	<ul style="list-style-type: none"> Did not see a doctor because of transportation problems 	In the last 12 months, there was some time when the respondent did not see a doctor because of transportation problems.
Organizational barriers	<ul style="list-style-type: none"> Visited a primary care clinic at least once in the last year 	Number of visits in the last 12 months with general practitioner, primary care physician, or family doctor.
	<ul style="list-style-type: none"> Did not go for an exam, treatment or follow-up visit due to difficulty obtaining an appointment 	In the last 12 months, there was some time when the respondent failed to seek care, an exam or treatment because he could not obtain an appointment.
	<ul style="list-style-type: none"> Appointment can be scheduled with the PC clinic by phone, mail, or online 	Possibility of obtaining an appointment in the place where the respondent usually goes to receive care.
	<ul style="list-style-type: none"> Difficulty in obtaining medical attention on evenings, weekends, or holidays makes it impossible to access care outside the emergency room 	Obtaining medical attention on evenings, weekends or non-working days without going to a hospital emergency room is difficult or very difficult.
	Time to access care by a doctor or nurse: <ul style="list-style-type: none"> Same day or the next More than two weeks or never 	Regarding the last time the respondent was sick or needed medical attention, how quickly could he get an appointment or a visit to see a doctor or a nurse when he requested it, without including a visit to the hospital emergency room?

Table 2.6. Experience with the use of PHC and the resolution capacity of services.

CATEGORIES	CHARACTERISTICS	DEFINITION OF THE VARIABLE
Patient-centered PHC	<ul style="list-style-type: none"> Has a doctor and/or health service that patient regularly visits 	The respondent usually goes to the same place or usually consults with a general practitioner.
	<ul style="list-style-type: none"> Communication with the PC clinic during the day is easy 	Communication with the general practitioner's office during the normal office hours for a health problem or to obtain the answers the patient needs is very easy or easy.
	<ul style="list-style-type: none"> The primary care physician (PCP) is familiar with important details of the patient's medical history 	When the patient needs care or treatment, the regular doctor or medical personnel with whom the respondent always or frequently consults is familiar with the patient's medical history.
	<ul style="list-style-type: none"> PCP helps coordinate care 	The regular doctor or someone at the respondent's doctor's office always, or often, helps the patient coordinate or obtain the care that he receives from other doctors and at other places.
	<ul style="list-style-type: none"> Has patient-centered PHC 	The respondent answered affirmatively to the four previous questions.
Perception of quality	<ul style="list-style-type: none"> Perception of very good quality of primary care 	In general, the medical assistance that the respondent has received in the last 12 months in the office, clinic or health facility of his general practitioner is excellent or very good.
	<ul style="list-style-type: none"> Had a medical issue and it took a long time to receive an adequate diagnosis 	In the last 12 months, there was a time when the respondent had a medical issue that worried him and it took him a long time to receive an adequate diagnosis.
Patient experience	<p>The PCP:</p> <ul style="list-style-type: none"> Allows the patient to ask questions about the recommended treatment Spends enough time with the patient Explains the situation in a way that is easy to understand Finds a solution to most of the patient's health problems 	When the patient needs care or treatment, the regular doctor or medical personnel with whom the respondent always or frequently consults allows him to ask questions about the recommended treatment, spends enough time with him, explains the situation in a way that is easy to understand and finds a solution to most of his health problems.
	<p>The PCP:</p> <ul style="list-style-type: none"> Reviewed the medications Explained the potential side effects of medications 	In the last 12 months, a general practitioner or other staff member from the place where the respondent habitually goes to receive care reviewed the medications and explained the potential side effects of prescription medications.

Table 2.7. Prevention, detection and management of chronic diseases.

CATEGORIES	CHARACTERISTICS	DEFINITION OF THE VARIABLE
Prevention	<ul style="list-style-type: none">The PCP sent a reminder for preventive care visit	The respondent receives reminders to schedule preventive care appointments (for example, for a flu vaccine, a cancer screening test or an eye exam).
	<ul style="list-style-type: none">The PCP talked about healthy lifestyles (diet, physical activity, stress factors)	In the last two years, the respondent has talked with his or her doctor or other clinical staff about healthy diet, exercise and physical activity, aspects of life that worry or produce stress.
	<ul style="list-style-type: none">Had a preventive care visit (check-up) in the last two years	Saw a doctor or nurse for a routine check-up less than two years ago.
Timely screening tests	<ul style="list-style-type: none">Blood pressure was checked in the last year (women/men)	During the past year, a doctor or nurse has taken the respondent's blood pressure.
	<ul style="list-style-type: none">Serum cholesterol level was checked in the last year (women/men)	The respondent's cholesterol was checked less than five years ago.
	<ul style="list-style-type: none">Basic screening exams for women	The respondent answered affirmatively the previous questions regarding check-ups (blood pressure in the last year and cholesterol check in the last five).
	<ul style="list-style-type: none">Basic screening exams for men	The respondent answered affirmatively the previous questions regarding preventive exams (blood pressure in the last year and cholesterol check in the last five).
	<ul style="list-style-type: none">Women who had a Pap smear in the last three years	The respondent had a Pap smear less than three years ago.
	<ul style="list-style-type: none">Women over age 40 who had a mammogram in the last three years	The respondent had a mammogram or breast cancer diagnostic test less than three years ago.
	<ul style="list-style-type: none">Timely screening tests for women over 40	The respondent answered affirmatively to the previous questions related to the four preventive exams (blood pressure in the last year, cholesterol check in the last five, Pap smear in the last three and a mammogram in the last three)
Management of chronic diseases	<ul style="list-style-type: none">Has a chronic illness, has confidence that he can manage his health problems	Respondent with a chronic illness is very confident or somewhat confident in being able to monitor and manage his health problems.

Table 2.8. Access to specialty care and coordination with primary care.

CATEGORIES	CHARACTERISTICS	DEFINITION OF THE VARIABLE
Access to specialty care	<ul style="list-style-type: none"> Consulted with a specialist in the last two years 	The respondent consulted or needed to consult with a specialist in the last two years (surgeons, cardiologists or dermatologists, pediatricians or obstetricians who specialize in an area of medicine).
	Wait time for a consultation with the specialist: <ul style="list-style-type: none"> <2 weeks 2–8 weeks >8 weeks 	Following the recommendation or decision to consult with a specialist, how many days, weeks or months did the respondent wait for the consultation?
Coordination between PHC and specialty care	<ul style="list-style-type: none"> It is necessary to ask for a referral for specialty care 	To consult with a specialist, was it necessary to request a referral at the clinic/regular health facility or from the respondent's general practitioner?
	<ul style="list-style-type: none"> The referral process was carried out by the doctor from the regular place of care 	The process of referral to a specialist was made by the doctor from the regular place of care or by the emergency room.
	<ul style="list-style-type: none"> The referral process was performed by a doctor who is not in the regular place of care or in the emergency room 	
	<ul style="list-style-type: none"> The specialist had basic medical information from the regular PCP about the reason for the patient's consultation or test results. 	In the last two years, the respondent has experienced one of the following situations: (a) the specialist had information about the reason for his/her consultation or the results of exams from the general practitioner or (b) after consulting with the specialist, his general practitioner seemed informed and updated about the care he got from the specialist.
	<ul style="list-style-type: none"> After consultation with the specialist, the regular PCP was informed about the recommendations made by the specialist 	

Table 2.9. Need for hospitalizations and use of emergency services.

CATEGORIES	CHARACTERISTICS	DEFINITION OF THE VARIABLE
Hospitalization	<ul style="list-style-type: none">Required hospitalization in the last two years	The respondent has had to be hospitalized for one or more nights in the last two years.
	<ul style="list-style-type: none">After discharge, he was readmitted or had to go to the emergency room	After having been discharged, the respondent was hospitalized again or had to go to the emergency room due to complications.
	<ul style="list-style-type: none">Hospital staff provided information about medication upon discharge	At the time of discharge, someone spoke with the respondent about the purpose of taking each of his medications.
	<ul style="list-style-type: none">Hospital staff helped coordinate a follow-up consultation	When the respondent was discharged, the hospital coordinated or made sure that he had follow-up visits with a doctor or another health care professional.
	<ul style="list-style-type: none">The hospital staff provided written information about self-care	When he was discharged, the respondent received written information about what he should do when he returned home and what symptoms he should watch out for.
Emergency department	<ul style="list-style-type: none">Used the emergency room in the last two years	Number of times that the respondent has personally used the hospital emergency room in the last two years.
	<ul style="list-style-type: none">Considers that he used the emergency room for conditions that could have been treated at the primary level	The last time the respondent went to the emergency room of a hospital was due to a condition or illness that he thinks his general practitioner or health facility could have treated.
	<ul style="list-style-type: none">After being evaluated in the emergency department, he was hospitalized or referred to another medical clinic	After being evaluated in the emergency department, the respondent was admitted to the hospital or referred to another clinic or medical facility.
	<ul style="list-style-type: none">After being evaluated in the emergency department, the patient was discharged	After being evaluated in the emergency department, the respondent was discharged.

the definitions used for variables related to access to specialty care and coordination with primary care, while table 2.9 shows those used for variables related to the need for hospitalizations and use of emergency services.

Study Limitations

The interpretation of the survey data must take into account some intrinsic limitations to the design of the study and the characteristics of its implementation. First, the data collected are self-reported, so they focus on the user's perception of the attributes and quality of health care experienced. If no identification data of the respondents was recorded beyond the sociodemographic characteristics necessary for the process of construction of the sample, it is not possible to correlate the results with measures of perception reported by the health service providers, nor to associate the data with the patients' medical history or administrative records. However, the growing emphasis on patient experience as a relevant measure of the quality of health services (Burt *et al.* 2017) justifies the methodological decisions of focusing the surveys on the patient's perspective.

Second, the study's response rates are relatively low, ranging from a minimum of 29.0% in Colombia to a maximum of 43.8% in El Salvador. However, the observed rates align with what was expected for similar studies (Sá *et al.* 2016; Vallance *et al.* 2014; O'Toole *et al.* 2008); they strictly comply with the parameters initially established in the study protocols, which foresee a minimum response rate of 20%, in line with that established in the studies carried out by the Commonwealth Fund (Schoen *et al.* 2013).

Third, the comparison between different countries can be complicated due to differences in perceptions related to the health system and the need for health care. In order to minimize this limitation, the questionnaires were adapted to the reality and to the language variant in each country (Spanish in Colombia, El Salvador, Mexico and Panama, English in Jamaica, and Brazilian Portuguese in Brazil). The interviews were previously tested and adjusted according to the comprehension difficulties identified during the initial phase of the study in each country.

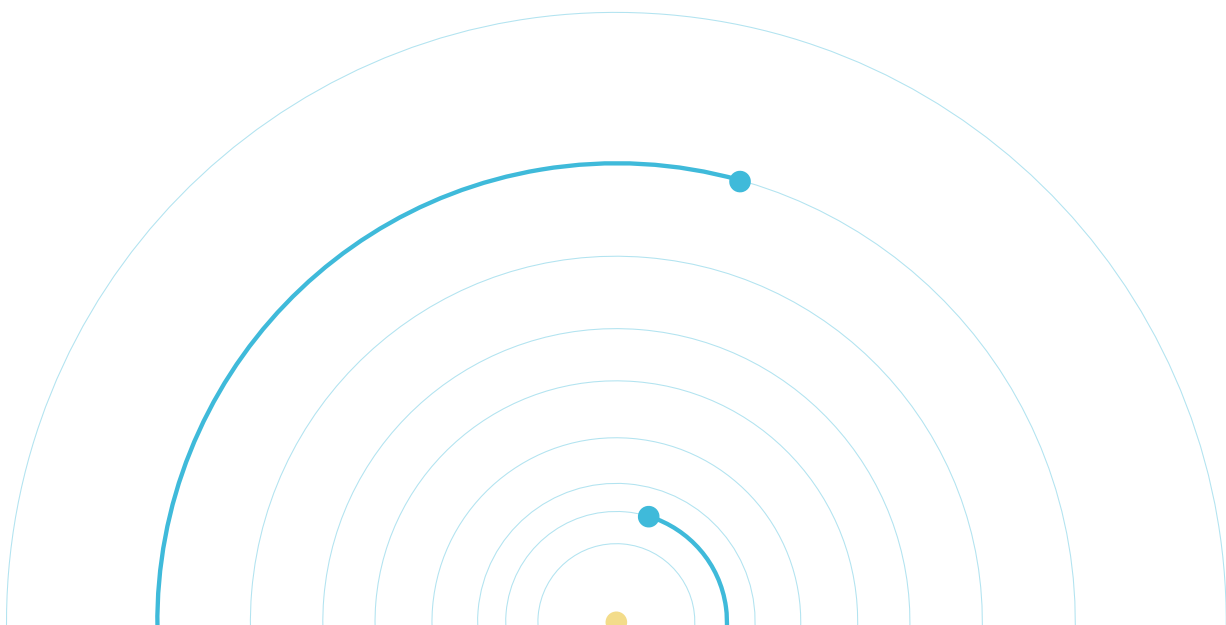
Fourth, as there are telephone interviews, there is a potential bias in the sample for not including the population without telephone (possibly the poorest people in each country), and the population with the greatest resistance to participation in telephone surveys, as well as due to the difficulties of reaching the population in rural areas. In order to minimize this limitation, the methodology of the survey specified the inclusion of mobile phones, considering the high penetration rates that said technology exhibits in the LAC region. In 2015, the number of mobile phones per 100 people in the countries included in the study was 126.6 in Brazil, 115.7 in Colombia, 145.3 in El Salvador, 111.5 in Jamaica, 86.0 in Mexico, and 174.2 in Panama, compared to an average of 115.4 in the OECD countries (WB, 2017). In addition, the research protocols established a minimum of eight attempts in case of non-response and a pre-established introductory text that included guarantees that it was not a sales effort, to minimize the bias due to resistance to participation. Finally, the sample weights pointed to the representativeness of the national population of each country.

Fifth, once sample sizes were established in order to achieve population representativeness in each country, it is difficult to obtain accurate estimates in relatively low prevalence events, such as elective surgeries in the general population of the LAC countries. In addition, the fragmentation of health coverage models subdivides the population into groups, which can further expand the estimated confidence intervals for descriptive statistics by type of coverage. This limitation is less problematic for events associated with primary health care, such as arranging preventive appointments, which are of higher prevalence. However, more detailed studies on population groups with complex health needs or on the experience of patients from coverage groups with less participation (for example, people who have private insurance), may consider additional quotas to achieve better estimates in those groups.

Sixth, in the LAC region, part of the population finds it difficult to self-

report the health coverage scheme with which it is affiliated. Possibly, this difficulty is related to the multiplicity and fragmentation of the coverage models of these countries and to the inequalities in educational levels and access to information (Atun *et al.* 2014). Therefore, it is likely that the coverage data self-reported by the respondents are different from those found in the national administrative bases.

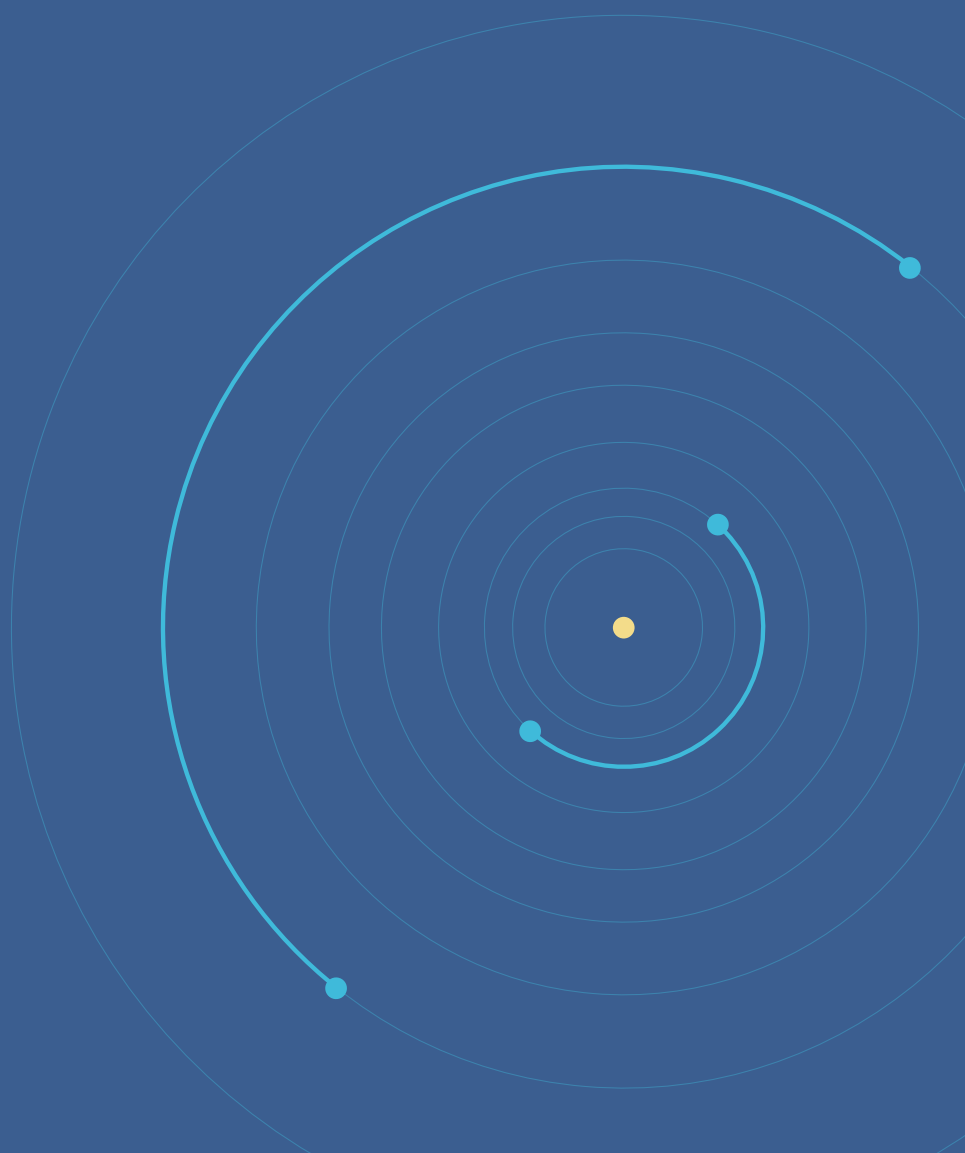
To conclude, the selection of countries included in the survey considered, in addition to the magnitude of the health reforms in each country, the criteria for the convenience of the application of the survey, as well as the inclusion of countries from each of the four administrative regions according to the IDB's organizational structure. Therefore, the possibility of generalizing the results to contemplate other countries not included in the sample is limited.



The Experience with Primary Health Care in Brazil

3

Marcia Rocha,
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Epidemiological profile and characteristics of Brazil's health system

In 2015, Brazil recorded a gross domestic product (GDP) per capita of US\$ 8,539, which places it slightly above the regional average in terms of income level. The average annual growth was 1.0% in the last five years, with a strong downward trend in the period (WB 2017). The levels of poverty and inequality have been steadily declining in the last two decades, and in 2014 around 3.1% of the population had a daily income of less than US\$ 3.10, adjusted for purchasing power parity. For 2014, total health expenditure in Brazil was 8.3% of GDP, around US\$ 950 per person, and in the same year, government health expenditure was 3.8%, around US\$ 440 per person (WHO 2017). In terms of total health expenditure, 46% was public and 54% was private, with out-of-pocket spending corresponding to 25.4% of the total expenditure.

Like most countries in the LAC region, as well as those that are included in this study, Brazil is in a process of a demographic and epidemiological transition. In the last 14 years, life expectancy at birth increased 4.4 years, and according to 2014 indicators, Brazilian women and men can expect to live 78.3 and 70.7 years, respectively (WB 2017). In turn, the proportion of adults over 65 increases at a rate higher than the growth of the total population. In Brazil, this age group is expected to increase from 5.1% in 2000 to 17.9%

in 2050, positioning Brazil as a country with more than 44 million older adults.

According to 2015 data from the Institute of Health Metrics and Evaluation (IHME), the burden of disease, measured in DALYs, attributed to NCDs is 70.9%, 14.8% for injuries, and 14.2% for the group of infectious and maternal and child diseases (IHME 2015). The burden of NCDs and injuries is on the rise, displacing infectious and maternal and infant diseases. The following NCDs predominate: cardiovascular diseases (14.8% of total DALYs); mental disorders and substance use (10.5%); different types of cancer (9.9%); other non-communicable diseases (9.1%); and diabetes, urogenital, hematological and endocrine diseases (7.2%). Among the main risk factors for NCDs are high systolic blood pressure (13.3% of total risk attributable to the global burden of disease), high body mass index (10.9%), high fasting plasma glucose (9.8%), smoking (7.6%), and high levels of total cholesterol (5.7%).

Brazil's current health system was created in the 1988 Constitution and regulated in 1990. The Unified Health System (SUS) has as its fundamental principle universal and equal access to health promotion, protection and recovery actions, integrated into a regionalized and hierarchical network of service provision, under the responsibility and co-financing of the federal, state and municipal spheres, and with the complementary participation of the private sector (Becerril-Montekio *et al.* 2011). Public coverage is universal, free at the care centers (no out-of-pocket expenses are foreseen), and the services are financed through the budgetary allocation of the state resources, originated by the general taxes (Bitrán and Burgos 2012). However,

in 2015, around a quarter of Brazilians (25.7%) had supplemental private coverage, through insurance purchased voluntarily in the private market (ANS 2017).

The Ministry of Health serves as the governing body for the policy and establishes SUS guidelines, whereas the states promote the integration of services between regions and are supplemental health providers, and the municipalities provide services directly to the population and are exclusively responsible for basic care. From its regulation in 1990, one of the main drivers of the expansion and strengthening of the SUS was a model of care with a strong emphasis on primary care through the Family Health Program (PSF), now better known as Family Health Strategy (Becerril-Montekio *et al.* 2011; Albino da Silva *et al.* 2015).

From its conception, the ESF was the basis of a clearly defined, community-based primary health care model. Multidisciplinary teams composed of a doctor, a nurse, one or two nursing assistants, and five or six paid community health agents must provide care to an assigned territory with a population of between 3,000 and 4,500 people (Acosta Ramírez *et al.* 2016; Giovanella *et al.* 2015). Subsequently, the option of including oral health teams was created in addition to a greater number of medical professionals. During the 1990s and the first decade of the 2000s, the ESF expanded rapidly: in 1998, around 2,000 family health teams, including 60,000 community health agents, served seven million people (4% of the country's population), while in 2014 more than 39,000 teams, including 265,000 community health agents, served 120 million Brazilians, about 60% of the population (Macinko and Harris 2015).

From the first study in 2006 that linked the expansion of the ESF to the reduction of infant mortality (Macinko *et al.* 2006), several investigations in the last decade have linked the ESF to the reduction of mortality and morbidity in children and adults (Guanais 2015; Rasella *et al.* 2014; Dourado *et al.* 2011; Rocha and Soares 2010; Macinko *et al.* 2010; Guanais and Macinko 2009). However, criticism persists about quality and access to health services in Brazil (Duncan *et al.* 2015) and progress in terms of equity has decreased in recent years (Mullachery *et al.* 2016).

In the current context, the increase in the prevalence of chronic conditions presents renewed challenges for the functioning of health services. In recent years, SUS has been seeking to respond to the challenges of the epidemiological transition by advancing in the organization of services according to a logic of health care networks (Vilaça Mendes 2013). These networks are organizational arrangements of health actions and services, of different complexities. Integrated by means of technical and logistical support systems, they seek to generate greater efficiency in expenses and guarantee the comprehensiveness of the service. In Brazil, there are important sources of information about the health status of the population, especially the National Health Survey, conducted in 2013 among households nationwide (Szwarcwald *et al.* 2014). However, considering the priority that the national government has devoted to strengthening primary care in the last two decades, and the model of integrated networks in the last decade, it is important to have an instrument designed just to explore the perspective of users from the organization of health services, their experiences with primary care, and their trajectories in the coordination

processes of the network between primary and specialty care and hospitalizations, as is the case of the Commonwealth Fund survey (Macinko *et al.* 2016). Therefore, the results of the administration of a variation of the Commonwealth Survey in the country offer a first look to characterize the country's health system from the perspective of a model of networks based on primary care. In addition, to date there are few sources of information about the performance of health services in Brazil that are similar to international surveys that have used the same methodology.

Below, we present the results obtained about the general perceptions of the users of the health system in Brazil, the financial and physical access to health services, the perceptions about the quality of primary care, and data about specialty care, in addition to the results related to the use of emergency services and hospital services. We discuss what these data mean in the context of Brazil, and what can they tell us about the gaps that exist in the health system and the inequities between the main subsystems: (a) the public system, financed by general taxes; (b) the private system, which includes those who decide to acquire supplemental private insurance. In the case of Brazil, there is no coverage model comparable to the social security models financed by mandatory payroll contributions. To facilitate reading and comparability among the six countries included in the 2013 version of the survey in LAC, this chapter uses the term “public” in reference to all Brazilians who do not have supplemental private insurance, given that public insurance coverage is universal; and “private,” in reference to those who have enrolled in an additional private plan.

Characteristics of the sample and general perceptions about the health system

The sample included 1,500 respondents with valid data, who were contacted by landline and cell phone in 2013, through a design that sought representativeness for the Brazilian population over 18 years of age.³ Table 3.1 presents the general characteristics of the population under study.

Although all the inhabitants of Brazil have SUS coverage, the sample was divided between those who only use this system (76.9%) and those who have additional private insurance (23.0%). There is an important correlation between the coverage scheme and the variables that describe the educational, socioeconomic and health status of the respondents. People who have supplemental private insurance, in general, reported a lower educational level, indicated a higher socioeconomic status and a worse self-reported health status than people enrolled exclusively with public insurance. On average, 48.7% of the respondents were male and 51.3% were female. Regarding education, 74.0% of SUS users did not continue beyond primary school, while for enrollees with supplemental private insurance the percentage was 29.6%.

Regarding the health status of the population surveyed, the percentage of respondents who reported having at least one chronic disease is significantly higher among those enrolled in additional private

insurance (41.6%) than among SUS users (32.0%). The percentage of respondents with a low self-perception of their health status was significantly lower among enrollees of supplemental private insurance (10.4%) than among SUS users (18.4%).

Table 3.2 presents the population's perceptions of the health system. The vast majority of those surveyed—both those who only have SUS coverage and those who have supplemental private insurance—considered that the health system requires fundamental changes. While 38.3% of SUS users and 46.9% of enrollees of supplemental private insurance considered that the health system has positive aspects, but needs fundamental changes, 56.6% of SUS users and 46.2% of enrollees with supplemental private insurance considered that there are so many problems in the health system that it is necessary to completely overhaul it. Only 2.8% of respondents with SUS-only coverage and 4.7% of enrollees with supplemental private insurance said that the health system works well and only minor changes are needed to make it work better.

Confidence in receiving the most effective treatment was particularly low among SUS users (27.4%) and relatively low among those enrolled in supplemental private insurance plans (54.1%).

Barriers to access services

Table 3.3 presents the respondents' answers about financial and transportation barriers in accessing health services.

³ For more details about the methodological design, see chapter 2.

Table 3.1. General characteristics of the sample by type of coverage in Brazil.⁴

CHARACTERISTICS	PUBLIC	PRIVATE	TOTAL
Number of respondents (n)	1,136	364	1,500
Weighting (%)	76.9	23.0	100.0
Sex (%)			
Women	51.3	51.2	51.3
Age (%)			
Age 18–25	19.4	22.4	20.1
Age 26–35	23.7	24.5	23.9
Age 36–45	21.4	22.0	21.5
Age 46–59	20.4	18.3	19.9
Age 60+	14.9	12.6	14.3
Education (%)			
Primary	74.0 ^a	29.6	63.8
Secondary	22.1 ^a	35.9	25.3
University	3.7 ^a	34.3	10.8
Health status (%)			
At least one chronic disease	32.0 ^a	41.6	34.2
Two or more chronic diseases	15.3 ^a	21.8	16.8
Low subjective perception of health status	18.4 ^a	10.4	16.6

Note:

a. Value differs from the result for private insurance ($p < 0.05$).

4 All of the results presented in the tables, except for the number of respondents, use sample weights for national population representativeness.

Table 3.2. Perceptions and confidence in the Brazilian health system.

CHARACTERISTICS	PUBLIC (%)	PRIVATE (%)	TOTAL (%)
Perception			
The system works quite well and only minor changes are needed to make it work better	2.8	4.7	3.1
Our health system has some positive aspects, but fundamental changes are needed to make it work better	38.3	46.9	40.1
There are so many problems in our health system that we must overhaul it completely	56.6	46.2	54.0
Confidence			
Confidence in receiving the most effective treatment, including medications and diagnostic tests	27.4 ^a	54.1	32.1

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for private insurance ($p < 0.05$).

Despite the free services provided in the SUS design, financial barriers still represent a serious obstacle in accessing these services in Brazil. It is observed that the confidence in receiving the most effective treatment was particularly low among users of the SUS (22.6%) and relatively low among those enrolled in supplemental private insurance (52.2%). Among SUS users, 90% indicated having had out-of-pocket expenses last year and, among them, 9.5% report that they had serious difficulties in paying them. Some respondents even reported not having visited the doctor (15.3%) or forgone a doctor-recommended treatment (16.5%) due to the cost. Among users of the public system, 20% indicated having had out-of-pocket expenses in excess of US\$ 200 in the last year and 5.9% mentioned

expenditures in excess of US\$ 500. In the group of policyholders in the private market, the proportion of respondents who said they did not go to the doctor (8.8%) or did not have a treatment (9.1%) because of its cost is lower. However, 89.3% of those surveyed with private insurance reported having incurred out-of-pocket expenses in addition to paying the insurance premium and 11.3% indicated having had difficulty paying them. Private insurance is also not a guarantee of low out-of-pocket expenses: in the year prior to the survey, 24.3% of users reported out-of-pocket expenses of more than US\$ 200 and 13.2% indicated that they exceeded US\$ 500.

Slightly more than 7% of the sample did not visit a doctor due to transportation

difficulties. This percentage is significantly higher for users of the public system (8.2%) than for those who have private insurance (4.5%).

Table 3.4 presents the respondents' answers about organizational barriers to accessing health services. In the case of primary care, this access was relatively generalized (78.6%), both for users of the public system and for those enrolled in

supplemental private insurance plans. Regarding organizational barriers, 75% of users of the public system and 51.9% of those with private insurance said that the lack of availability during evenings, weekends and holidays makes it impossible to access health care services without having to go to the emergency room.

On the other hand, the wait time to receive care from a doctor or nurse was relatively

Table 3.3. Financial and transportation barriers in Brazil.

CHARACTERISTICS	PUBLIC (%)	PRIVATE (%)	TOTAL (%)
Financial barriers			
Confidence in being able to pay for a treatment if necessary	22.6 ^a	52.2	27.4
Had medical problems but did not go to a doctor because of the cost	15.3 ^a	8.8	13.4
Did not go for an exam, treatment or follow-up visit due to cost	16.5 ^a	9.1	14.4
Out-of-pocket costs			
Had out-of-pocket costs	90.0	89.3	89.8
Had out-of-pocket expenses > US\$ 200	20.0	24.3	21.0
Had out-of-pocket expenses > US\$ 500	5.9	13.2	7.2
Had serious problems paying out-of-pocket expenses	9.5	11.3	9.9
Transportation barriers			
Did not see a doctor because of transportation difficulties	8.2 ^a	4.5	7.2

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status

a. Value differs from the result for private insurance ($p < 0.05$).

short, mainly among those surveyed with additional private insurance. Among users of the public system alone, 35.3% said they had been treated the same day or the next, while 15.6% waited more than two weeks or never got an appointment. Among those enrolled in a supplemental private insurance plan, 57.2% were seen on the same or the following day, and 10.3% had to wait two weeks or could never schedule an appointment. Likewise, 22.3% of public system users and 12.7% of those enrolled in a supplemental private insurance plan commented that they did not go for an exam, treatment or follow-up visit due to difficulties in scheduling an appointment.

Experience with the use of PHC

Table 3.5 presents the results of users' experience with primary health care services. The population sample for the questions on experience with primary care is composed of those who report having a clinic or regular doctor, so that they can evaluate the entirety of care received rather than each individualized interaction. The measures of experience with the use of primary care were divided into three dimensions: (1) the alignment with a patient-centered PHC model; (2)

Table 3.4. Organizational barriers and time to access primary care in Brazil.

CHARACTERISTICS	PUBLIC (%)	PRIVATE (%)	TOTAL (%)
Organizational barriers			
Visited the primary care center at least once in the last year	79.0	77.4	78.6
Did not go for an exam, treatment or follow-up visit due to difficulty obtaining an appointment	22.3 ^a	12.7	19.6
Appointment can be scheduled with the PC clinic by phone, mail, or online	10.4 ^a	80.2	20.4
Difficulty in obtaining medical attention on evenings, weekends, or holidays prevents access to care without having to go to the emergency room	75.0 ^a	51.9	68.9
Time to access primary care provided by a doctor or nurse			
Same day or the next	35.3 ^a	57.2	39.5
> 2 weeks or never	15.6	10.3	14.2

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for private insurance ($p < 0.05$).

the perception of the quality of care; and (3) the focus on the provision of patient-centered services.

In terms of the four attributes that describe a patient-centered care model, there is an important difference that does not favor SUS users: only 21.0% indicated having a healthcare or medical service that they regularly use. This percentage is significantly higher (69.8%) among enrollees with supplemental private insurance. SUS users also reported a lesser ease of communication with the PC clinic during the day (42.5% in the SUS versus 76.6% of those with private insurance), less familiarity with their medical history (29.6% in the SUS compared to 76.3% in private insurance), and less support from physicians to coordinate care (11.9% in the SUS versus 53.2% in private insurance). Even more representative was the difference when the four characteristics were compared together: 1.7% of SUS users reported having a patient-centered PHC, while 33.9% of those with private insurance do so.

There are several factors that influence the experience that patients have and the perception they acquire of care. Some of them are related to the relationship that patients form with their doctor. In most of these aspects, significant differences were observed between users of the public system and those with supplemental private insurance. Among the former, 55.5% said that their doctor allows them to ask questions about the recommended treatment, only 20.7% said that their doctor spends enough time with him or her, 60.0% indicated that the doctor explains the situation in a way that is easy to understand, and 46.4% said that their doctor solves most of their health problems. Among the latter, 71.9%

said they could ask questions about the treatment, 57.7% said they spent enough time with their doctor, 79.1% said they received easy-to-understand explanations and 72.2% reported that the doctor solves most of their health problems. Similar differences were observed with regard to the prescribing of medications. While 57.2% of SUS users said that their doctor reviewed their medications, this percentage rises to 66.6% among those with supplemental private insurance.

Furthermore, 13.2% of SUS users and 11.6% of those with supplemental private insurance had a medical issue and said that it took a long time to obtain adequate care. All these dimensions contribute to patients developing different perceptions of the care received. In line with the aforementioned, the perception of the quality of primary care was significantly higher among those with supplemental private insurance (56.4%) than among users of the public system (18.8%).

Table 3.6 presents the results of prevention, detection and management of chronic diseases. With respect to whether the PCP sent a reminder for the check-up, 22.0% of the total of respondents answered affirmatively, with there being a significant difference between SUS users (18.9%) and those who have private insurance (34.2%). Of those surveyed, 24.3% indicated that they had received some kind of recommendation on healthy lifestyles from their family doctor. This percentage was lower among SUS users (21.9%) compared to those enrolled in supplemental private insurance plans (34.1%).

An important measure of the quality of primary care services is the degree of compliance with preventive care norms. Due to the growing burden of chronic

Table 3.5. Experience with primary care in Brazil.

CHARACTERISTICS	PUBLIC (%)	PRIVATE (%)	TOTAL (%)
Patient-centered PHC			
Has a doctor and/or health service that patient regularly visits	21.0 ^a	69.8	27.7
Communication with the PC clinic during the day is easy	42.5 ^a	76.6	52.0
The primary care physician (PCP) is familiar with important information about the patient's medical history	29.6 ^a	66.3	38.7
PCP helps coordinate care	11.9 ^a	53.2	19.6
Has patient-centered PHC	1.7 ^a	33.9	3.1
Patient experience			
The PCP allows the patient to ask questions about the recommended treatment	55.5 ^a	71.9	60.5
The PCP spends enough time with the patient	20.7 ^a	57.7	29.1
The PCP explains the situation in an easy-to-understand way	60.0 ^a	79.1	65.9
The PCP finds a solution to most of the patient's health problems	46.4 ^a	72.2	53.7
The PCP reviewed the patient's medications	55.2	66.6	59.1
The PCP explained the potential side effects of medications	52.7	60.0	55.2
Perception of quality			
Perception of very good quality with regard to primary-level care	18.8 ^a	56.4	27.1
Had a medical issue and it took a long time to receive an adequate diagnosis	13.2	11.6	12.8

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for private insurance ($p < 0.05$).

diseases in the region, measures to prevent chronic diseases are particularly important. All respondents were asked about blood pressure and serum cholesterol checks, and all women about screening with Pap tests and mammograms in women over age 40. The percentage of men reporting a blood pressure check in the last year and measurement of serum cholesterol levels in the last five years was considerably higher among those enrolled in additional private insurance (62.3%) than among SUS users (44.6%). In contrast, there was a smaller gradient in the percentage of women than

in those who had had those two screenings, comparing SUS users and those with supplemental private health insurance (55.9% and 65.1%, respectively).

The timely screening tests (in the target population) most frequently reported by women were Pap smears (92.8%) and mammograms among those over age 40 (87.8%), with slight differences among SUS users (92.0% and 85.6%, respectively, for the two exams) and those with supplemental private insurance (95.8% and 96.5%, respectively). This is

Table 3.6. Prevention, detection and management of chronic diseases in Brazil.

CHARACTERISTICS	PUBLIC (%)	PRIVATE (%)	TOTAL (%)
Prevention			
The PCP sent a reminder for a check-up	18.9 ^a	34.2	22.0
The PCP discussed healthy lifestyles (diet, physical activity, stress factors)	21.9 ^a	34.1	24.3
Had a preventive care visit (check-up) in the last two years	39.4 ^a	50.7	41.7
Timely screening tests in women			
Women who had their blood pressure checked in the last year	60.3	67.9	62.0
Women who had their serum cholesterol checked in the last year	80.3	83.5	81.0
Basic early screening tests for women (blood pressure and cholesterol check)	55.9	65.1	57.9
Women who underwent Pap smear in the last three years	92.0	95.8	92.8
Women over age 40 who had a mammogram in the last three years	85.6 ^a	96.5	87.8
Early detection tests for women over age 40 (blood pressure, cholesterol check, Pap smear and mammogram)	54.1	68.8	56.6

Table 3.6. Continues from previous page.

CHARACTERISTICS	PUBLIC (%)	PRIVATE (%)	TOTAL (%)
Timely screening tests in men			
Men who had their blood pressure checked in the last year	49.2 ^a	68.1	53.0
Men who had their serum cholesterol checked in the last year	76.3	85.3	78.3
Basic early screening tests for men (blood pressure and cholesterol check)	44.6 ^a	62.3	48.2
Management of chronic diseases			
Has a chronic illness, has confidence that he can manage his health problems	76.8	86.1	79.4

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status. Prevalence of the variables for prevention and management of chronic diseases also sex-adjusted.

a. Value differs from the result for private insurance ($p < 0.05$).

followed by the measurement of serum cholesterol levels (81.0%) and blood pressure screening (62.0%), without statistically significant differences between the two coverage groups.

Access and coordination of specialty care, hospitals and emergency services with primary care

Another important aspect that influences the continuity of care is the coordination of attention. Table 3.7 presents the results related to the use of specialty care, and

the experience of users with referrals and counter-referrals between primary and specialty care.

The use of specialty care services was 35.3% among SUS users and 57.5% among enrollees with supplemental private insurance. The wait time required to schedule a consultation was relatively low among those surveyed with supplemental private insurance (33.2% said they had obtained a consultation in less than two weeks, 27.4% between two and eight weeks, and 21.2% more than eight weeks) compared to SUS users (9.4% of them indicated that they had scheduled a consultation in less than two weeks, 31.4% between two and eight weeks, and 43.4% in more than eight weeks). Regarding the process of referral to specialty care, 78.7% of those surveyed indicated that they

had been referred by the doctor at their regular place of care.

Among SUS users, there was a notable lack of communication between family physicians and specialists: only 26.8% of respondents indicated that the specialist had basic clinical information provided by the family doctor on the reason for the referral or test results. Likewise, 24.2% reported that after consultation with the specialist, the family doctor had been informed or updated on the recommendations that the specialist had made. Although a percentage of those with supplemental private insurance reported this situation more frequently, the figures remain low: 44.6% said that the specialist received information regarding the reason for the referral and 45.0% said that the family doctor was aware of the recommendations made by the specialist.

Table 3.8 presents the results of access and quality of hospitalization and emergency services. The percentage of respondents who required hospitalization in the last two years was 3.1% among SUS users and 10.6% among enrollees with supplemental private insurance. Of the SUS users who were hospitalized, 18.9% were readmitted after discharge or had to go to an emergency service due to complications. Among those with supplemental private insurance, this percentage was 9.5%.

After discharge from the hospital, on average, 79.3% of the total surveyed indicated that the hospital staff provided written information on self-care and 73.5% reported having received help to coordinate a follow-up consultation. With regard to prescribed medications, 70.7% said that they received information about the medication upon discharge, without significant difference by type of coverage.

On average, 25.2% of those surveyed indicated that they had used the emergency service in the last two years. This percentage varied between 25.3% for SUS users and 25.0% for those with supplemental private insurance. Of respondents in the first group, 22.9% considered that they used the emergency service for conditions that could have been treated at the primary-care level. Among those with supplemental private insurance, this percentage represented 43.2% of the respondents.

Likewise, approximately 15.7% of those surveyed indicated that they had been hospitalized or referred to another clinic after an emergency room visit and 81.1% reported having been discharged. This last percentage is similar between those enrolled in supplemental private insurance plans (81.8%) and SUS users (80.8%). A similar phenomenon was observed in the number of patients hospitalized or referred to other medical clinics (15.6% among SUS users and 16% among those enrolled in supplemental private insurance).

Discussion

The degree of satisfaction that Brazilians indicated with respect to their health systems was the lowest of the group of six countries included in the survey in LAC. The majority of respondents (54%) thought that there are so many problems in the health system that it is necessary to completely overhaul it. This perception, as well as the difference observed between users of the public and private system, is not statistically significant. One point that should be noted in the interpretation of these figures is that the data collection for the study was carried out in Brazil in 2013, when there were

Table 3.7. Access to specialty care and coordination with primary care in Brazil.

CHARACTERISTICS	PUBLIC (%)	PRIVATE (%)	TOTAL (%)
Access to specialty care			
Consulted with a specialist in the last two years	35.3 ^a	57.5	39.5
Wait time for a consultation with the specialist			
< 2 weeks	9.4 ^a	33.2	13.8
Between 2 and 8 weeks	31.4	27.4	30.1
> 8 weeks	43.4 ^a	21.2	34.9
Coordination between PHC and specialty care			
It is necessary to ask for a referral for specialty care	70.8	66.0	69.2
The referral process was carried out by the doctor from the regular place of care	79.3	77.5	78.7
The referral process was performed by a doctor who is not in the regular place of care or in the emergency room	5.4	2.5	4.1
The specialist had basic medical information from the regular PCP about the reason for the patient's consultation or test results.	26.8 ^a	44.6	31.8
After consultation with the specialist, the regular PCP was informed about the recommendations made by the specialist	24.2 ^a	45.0	29.9

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for private insurance ($p < 0.05$).

Table 3.8. Need for hospitalizations and use of emergency services in Brazil.

CHARACTERISTICS	PUBLIC (%)	PRIVATE (%)	TOTAL (%)
Hospitalization			
Required hospitalization in the last two years	3.1 ^a	10.6	4.2
After discharge, patient was readmitted or had to go to the emergency room	18.9	9.5	13.4
Hospital staff provided information about medication upon discharge	66.4	74.8	70.7
Hospital staff helped coordinate a follow-up consultation	68.5	78.2	73.5
The hospital staff provided written information about self-care	75.7	82.7	79.3
Emergency department			
Used the emergency room in the last two years	25.3	25.0	25.2
Considers that he used the emergency room for conditions that could have been treated at the primary level	22.9 ^a	43.2	27.0
After being evaluated by the emergency room, he was hospitalized or referred to another medical clinic	15.6	16.0	15.7
After being evaluated in the emergency department, the patient was discharged	80.8	81.8	81.1

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for private insurance ($p < 0.05$).

significant street protests and high levels of public dissatisfaction with public policies in general (Macinko *et al.* 2016).

In terms of access barriers, there are still significant financial barriers to the use of services, despite the fact that the country has a single public system, universal affiliation regardless of employment

or socioeconomic status, and no costs to the user at the point of care. Among exclusive users of the public system, around 17% reported not having seen the doctor or not having undergone exams or treatments due to the cost, a percentage higher than that observed among those with private insurance, who, in general, have a better socioeconomic status. The

vast majority of Brazilians reported having incurred out-of-pocket expenses in the last year, including users of the public system, which may indicate that essential elements of the treatment are not covered, such as medications (Paim *et al.* 2011), or that, for reasons of quality or wait times in public services, people are looking for services in the private network (Fundación Telefónica 2008).

Despite the fact that the public system has defined a clear model for primary care (the ESF), the data indicate that there is still an important unfinished agenda in the PHC: organizational barriers create inequities in access to primary care between public health care system users and those with private insurance. The percentage of people who reported getting an appointment in primary care on the same or the next day was almost twice as high among private insurance users as among users of the public system. Also, a surprisingly low number of people in the public system indicated having a doctor or regular service (21%), one of the pillars of the ESF model, which reinforces the idea of the unfinished agenda. Likewise, communication with the PHC is much easier for patients who have private insurance than for those who use the public system: the percentage of people who managed to communicate with the APS during the day was almost double that of those with private insurance, and the percentage of those able to schedule appointments by phone, mail or online was almost eight times higher (76.6% vs. 42.5% and 80.2% vs. 10.4%, respectively). These numbers confirm the argument that the ESF model needs important adjustments to serve a predominantly urban population (Giovannella *et al.* 2009), for whom the financial and opportunity cost of displacement can be an important barrier.

The user's perceptions regarding barriers to access to the public health system in Brazil are systematically collected by the Program for Improvement of Access to and Quality of Basic Care (PMAQ).⁵ The data from the surveys administered throughout the country in 2012 (first round of the program) provide interesting information that can corroborate some findings of this study. For example, it was also found that only 2.2% of surveyed users managed to schedule their medical consultations by telephone and 11.6% received help from the community health agent to do so. This indicates that more than 90% of appointments are scheduled in person at the health clinics. In fact, more than 30% of respondents said that they had to face lines to schedule a consultation. Also, 41.4% of users reported that their primary care referral services only allow scheduling of medical appointments on certain days of the week. This indicates that there is ample room for improvement for the PHC to effectively fulfill its role as care coordinator, as established in the ESF.

In general terms, PHC utilization rates are similar for the two subsystems in Brazil, as almost 80% of users in both systems indicated having had a consultation within the last year. However, almost 60% of those with private insurance indicated a perception of very good quality of care at the primary level, compared to 20% among users of the public system. It should be noted that this is users' perception and corresponds to their interpretation of what is primary care, since there is no clearly-defined PHC model in the private sector for this level of care. The variables that

5 View the results of the first round of the PMAQ at http://bvsmis.saude.gov.br/bvs/publicacoes/retratos_atencao_basica_2012_sl_vol1.pdf

seek to measure the quality of the primary care experience also suggest important inequities, confirming the analyses observed in the literature (Mullacherry *et al.* 2016; Boccolini *et al.* 2016; Malta *et al.* 2016). For example, only 30% of people in the public system reported that doctors knew their medical records (compared to 66% in the private sector), 21% of users of the public system said that the doctor spends sufficient time with them (compared to 58% in the private sector) and 46% in the public system said that PHC resolves most of their health issues (72% in the private sector). Although average levels indicate important inequities, it is vital to consider that there are also significant inequalities among public system users, which have been widely documented (Guanais 2010), and among private insurance users, which are just beginning to be documented (Werneck 2016).

The results indicate that there are important aspects to improve upon in terms of the degree of proactivity of primary care. Less than a quarter of respondents received reminders from the PHC for a check-up (19% in the public system vs. 34% in the private system) or recommendations for healthy lifestyles (22% vs. 34%). Taking into account the epidemiological profile of the Brazilian population, increasing the degree of proactivity of health services to involve the patient in his treatment will be a challenge that will increase (Vilaça Mendes 2014). In terms of early screening, the inequities between the public system and those with private insurance are lower, especially among women; for example, 56% of women in the public system and 65% of women with private insurance indicated that they had received basic exams (45% compared to 62% among men). These results

are supported in the literature, which suggests that the ESF shows more modest results among men than among women, which may be associated with the office hours of health services and the lower labor participation of women compared with men in Brazil (Guanais and Macinko 2009). With regard to preventive exams in women, the most attention-getting data for the last three years are the high rates of Pap tests in both subsystems (92% in the public system and 96% in private insurance) and mammograms in women over 40 (86% versus 97%), numbers that are higher than blood pressure checks in the last year.

The percentage of the sample that consulted a specialist in the last two years was lower among users of the public system, and wait times were considerably higher than those reported by those with private insurance. In the public system, only 9% of people got an appointment with a specialist in less than two weeks, as compared to 33% of users with private insurance. This can also be explained due to the absence and/or fragility, in most private insurers, of regulatory services (which function as gatekeepers for access to specialty services), which are more frequent and robust in the public system. In terms of coordination between the PHC and specialty care, in the public system, users reported low levels of physician support in this regard, and communication problems between both types of care were reported in the two subsystems, although in the public system this problem was even more significant, with more than 63% of people indicating that communication was non-existent, as compared to 55% with private insurance.

The utilization of emergency services in Brazil is relatively lower than that of the

other LAC countries in the survey and does not differ between users of the public system and those with private coverage (in both cases about 25% used the emergency room in the last two years). However, unnecessary use of the emergency room seems to be higher in the private system, in which 43% of the users considered that their problem could have been resolved in primary care (compared to 23% in the public system).

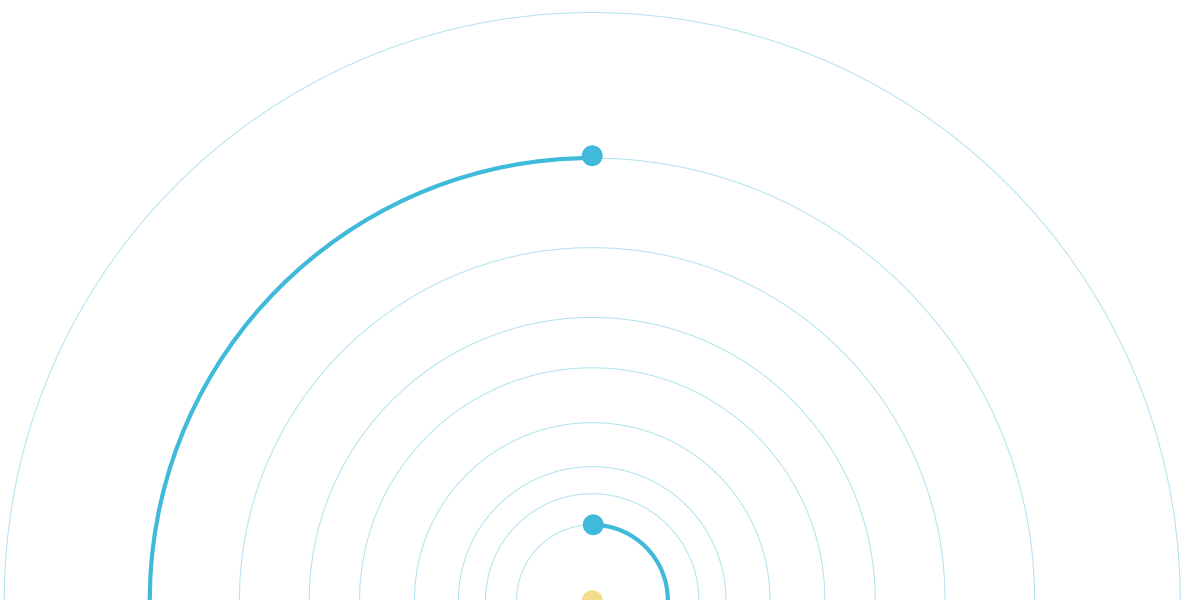
Some organizational barriers (difficulty communicating, obtaining appointments, coordinating between levels, etc.) can be associated with deficiencies in the local management of primary care, and the difficulty of homogenizing the processes due to significant cultural differences between the country's different regions. Similarly, the degree of decentralization in Brazil gives rise to differences between the municipalities according to their level of development, that is, municipalities with a higher level of income and progress have a greater opportunity to invest in technology and human resources to improve their management and supply of services.

Conclusions

On the whole, the results indicate that the primary care model and the emphasis on preventive care in Brazil have made important progress in reducing the gap between the universal public system and private insurance users, both in terms of coverage and equity. The differences reported in the performance of preventive exams among the different subsystems in Brazil are surprisingly small, even in

the case of specialized exams such as Pap smears or mammograms. However, among these groups there are still significant inequities in access to primary care, and it is clear that users of private insurance reported having a better experience in primary care. In any case, coordination problems are reported in both subsystems.

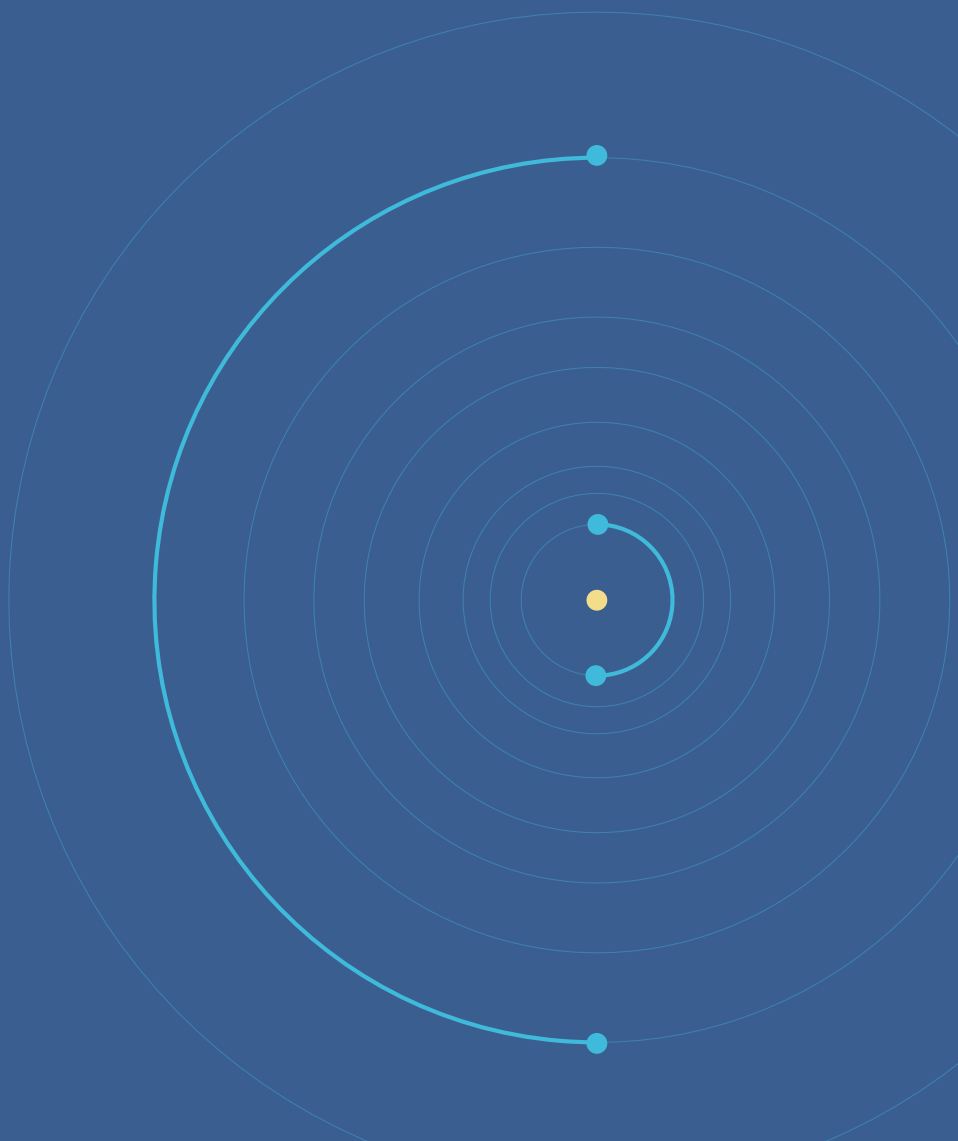
Despite the important successes of primary care in Brazil, which are widely documented in the literature, the results indicate the need to improve the service management model; for example, better communication with patients, better scheduling systems for appointments and consultations, and better coordination procedures between levels of care. It is important for the country to continuously strengthen its primary care model and continue to promote its integration with other levels of care, emphasizing the coordination between primary and secondary care, to provide long-term care due to the aging of the population (Stein and Ferri 2017). The coordination between levels of care achieves more effectiveness and continuity of care, thus adapting it to the challenge of serving urban populations with a high burden of chronic diseases and with expectations about the coverage and quality of services that are increasing. The strengthening of primary care through the Family Health Strategy has had a tangible effect, for example, in the reduction of avoidable mortality (Hone *et al.* 2017), among other advances. However, in a society in transition such as Brazil's, it is important for the modernization process of primary care to be constant and intensive in order to preserve these achievements and to see better results in the future.



The Experience with Primary Health Care in Colombia

4

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Epidemiological profile and characteristics of Colombia's health system

In 2015, Colombia recorded a per capita GDP of US\$ 6,056, which places the country slightly below the average of the region in terms of income level while the average annual growth was 4.6% in the last five years (WB 2017). The levels of poverty and inequality have been steadily declining in the last two decades, and in 2014 around 5% of the population had a daily income of less than US\$ 3.10, adjusted for purchasing power parity. In 2014, total health spending in Colombia was 7.2% of GDP, around US\$ 570 per person, while in the same year government spending on health was 5.4%, around US\$ 428 per person (WHO 2017). In terms of total health expenditure, 75% was public and 25% was private, with out-of-pocket spending corresponding to 15.4% of the total expenditure.

Like most countries in the LAC region, as well as those that are included in this study, Colombia is in a process of demographic and epidemiological transition. In the last 14 years, life expectancy at birth increased three years, and according to 2014 indicators, Colombian women and men can expect to live 77.7 and 70.5 years, respectively (IHME 2015). In turn, the proportion of adults over 65 is growing at a rate higher than that of the total population. In Colombia, this age group is expected to increase from 4.7% in 2000 to 16.2% in 2050, positioning Colombia as a country with more than 11 million older adults.

According to 2015 data from the IHME, the burden of disease, measured in DALYs, attributed to NCDs is 70.8%, 16.6% for injuries, and 12.6% for infectious and maternal and child diseases (IHME 2015). The burden of NCDs and injuries is on the rise, displacing infectious and maternal and infant diseases. The following NCDs predominate: cardiovascular diseases (11.5% of total DALYs); mental disorders and substance abuse (10.5%); different types of cancer (9.7%); other non-communicable diseases (12.2%); and musculoskeletal disorders (8.9%). Among the main risk factors for NCDs are high systolic blood pressure (10.8% of total risk attributable to the global burden of disease), high body mass index (8.0%), high fasting plasma glucose (7.8%), smoking (4.9%), and high levels of total cholesterol (4.2%).

The current Colombian health system was established through the enactment of Law 100 of 1993, which created the General System of Social Security in Health (SGSSS). The main objectives of the law were aimed at improving the health of the population by increasing access, efficiency and quality of services, as well as equity. The central strategy of this reform to achieve these objectives consisted in the creation of universal health insurance, the targeting of public services, and changes in the financing, organization and administration of service delivery.

As mentioned, the SGSSS consists of a universal health insurance with family coverage, managed by companies called health promoting enterprises (EPS), which act as insurers (manage risks in exchange for a premium) and are responsible for contracting services to which the enrollees of healthcare provider institutions (IPS) are entitled. The services, interventions and drugs covered under the insurance

scheme are defined by a package of benefits called the Compulsory Health Plan (POS).⁶ The premium or monetary value that the government pays the EPS to provide the POS is called a capitation payment unit (UPC).

Insurance enrollment occurs under one of two schemes. One is the contributory scheme (*régimen contributivo*, in Spanish) for formal employees, retirees, pensioners and independent workers, which in 2015 covered approximately 44.5% of the total population, around 21.5 million people. The contributory scheme is financed with payroll taxes on formal workers (contributions of workers and employers to the contributory regime). The second is the subsidized scheme (*régimen subsidiado*, in Spanish), which covers the low-income population with no capacity to pay, approximately 48.1% of the total population, some 23.2 million people (MSPS, 2016b). The subsidized scheme is financed mainly by government funds from general taxes (Guerrero *et al.* 2011).

The system is organized as a competition model regulated in two levels. In the first, beneficiaries select an EPS from an available set of options. Given that both POS and UPC are predetermined, in theory, EPSs must compete by attracting enrollees based on differences in the breadth and quality of the service delivery network. In the second level, competition occurs between IPSs, who seek to obtain contracts with EPSs according to the price and quality of the services offered. The role of the Ministry of Health and other related regulatory entities is to provide information and formulate, monitor and

⁶ This was the current scheme at the time of the survey. In 2017, Colombia analyzed changes to its benefit plan.

enforce regulations aimed at minimizing market failures and guaranteeing equitable access to health services.

Below, we present the results obtained about the general perceptions of the users of the health system in Colombia, the financial and physical access to health services, the perceptions about the quality of primary care, and data about specialty care, in addition to the results related to the use of emergency services and hospital services. We discuss what these data mean in the context of Colombia, and what can they tell us about the functioning of primary healthcare in the main subsystems. To facilitate reading and comparability among the six countries included in the 2013 version of the survey in LAC, this chapter uses the term “social security” in reference to contributory scheme enrollees, “public” in reference to subsidized scheme enrollees, and “private” in reference to those with a supplemental private plan.

Characteristics of the sample and general perceptions about the health system

The sample includes 1,463 people over 18 years of age⁷ who responded to a telephone survey administered by landline and cell phone in 2013. Table 4.1 below presents the general characteristics of the population under study.

Of the respondents, 22.7% declared that they were enrolled in the subsidized scheme,

68.0% in the contributory scheme and 9.3% in a supplemental private insurance plan.⁸ With regard to the sex of the respondents, 51% were female, with the lowest percentage in the contributory scheme (50.4%) and in private insurance (45.9%), and the highest for the subsidized scheme (55.5%). The respondents enrolled in the subsidized scheme are younger—more than 80% percent are in the 18 to 45 age range—and this percentage is lower in the contributory scheme (62.6%), while almost half of those with private insurance are over 45.

There is an important correlation between the coverage scheme and the variables that describe the educational, socioeconomic and health status of the respondents. In general, the education of subsidized scheme enrollees is lower, and their self-reported health status is worse compared to contributory scheme enrollees and supplemental private insurance. One third of the respondents indicated that they had been diagnosed with at least one chronic disease, the highest percentage being among those in the contributory scheme and private insurance (35.1% and 34.2%, respectively) compared to 25.0% of SR enrollees, which is consistent with the fact that the respondents of the latter scheme are younger.

The percentage of respondents who reported a low perception of their health status was 18.3%, being lower in the contributory scheme (16.8%) and in private insurance (13.8%), and higher among subsidized scheme enrollees (24.9%).

⁷ For more details about the methodological design, see chapter 2.

⁸ To clarify, 26 respondents (1.78% of the total) who stated that they were not enrolled in any health plan were included in the subsidized regime (public).

Table 4.1. General characteristics of the sample by type of coverage in Colombia.⁹

CHARACTERISTICS	PUBLIC (SUBSIDIZED SCHEME)	SOCIAL SECURITY (CONTRIBUTORY SCHEME)	PRIVATE	TOTAL
Number of respondents (n)	277	1,046	140	1,463
Weighting (%)	22.7	68.0	9.3	100.0
Sex (%)				
Women	55.5	50.4	45.9	51.2
Age (%)				
18-25	30.0 ^{a, b}	16.5	12.6	19.2
26-35	26.3 ^b	25.3 ^b	13.2	24.4
36-45	26.7	20.9	25.2	22.6
46-59	14.6 ^{a, b}	25.0	26.9	22.8
60+	2.3 ^{a, b}	12.4 ^b	22.2	11.0
Education (%)				
Primary	31.3	23.6	18.6	24.9
Secondary	64.1 ^{a, b}	51.7 ^b	37.9	53.2
University	4.6 ^{a, b}	24.7 ^b	43.6	21.9
Health status (%)				
At least one chronic disease	25.0 ^a	35.1	34.2	32.7
Two or more chronic diseases	9.9	12.8	14.9	12.4
Low subjective perception of health status	24.9 ^a	16.8	13.8	18.3

Notes:a. Value differs from the result for social security ($p < 0.05$).b. Value differs from the result for private insurance ($p < 0.05$).

⁹ All of the results presented in the tables, except for the number of respondents, use sample weights for national population representativeness.

Table 4.2 below presents the population’s perceptions of the health system. The perception that changes are needed is prevalent: 51.0% of respondents indicated that the health system has some positive aspects, but that fundamental changes are needed to make it work better, while 30.3% considered that there are so many problems in the health system that it has to be completely overhauled. Only 14.7% of the respondents held the opinion that the health system works well and that only minor changes are needed. The

respondents in the subsidized scheme have more negative perceptions than those of the contributory scheme and private insurance.

Regarding confidence in receiving the most effective treatment or being able to pay for the treatment, slightly more than half of the respondents indicated thusly, being higher for private insurance (61.1%) compared to the SR (56.1%) and social security (53.2%).

Table 4.2. Perceptions and confidence in the health system in Colombia.

CHARACTERISTICS	PUBLIC (SUBSIDIZED SCHEME) %	SOCIAL SECURITY (CONTRIBUTORY SCHEME) %	PRIVATE (%)	TOTAL (%)
Perceptions				
The system works quite well and only minor changes are needed to make it work better	8.6	15.7	16.5	14.7
Our health system has some positive aspects, but fundamental changes are needed to make it work better	59.1	49.8	45.6	51.0
There are so many problems in our health system that we must overhaul it completely	29.0	30.9	33.8	30.3
Confidence				
Confidence in receiving the most effective treatment, including medications and diagnostic tests	56.1	53.2	61.1	54.9

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status. There are no statistically significant differences between the three subgroups for the variables indicated in the table.

Barriers to access services

Table 4.3 below presents the respondents' answers about financial and transportation barriers in accessing health services. In terms of financial barriers, the percentage of respondents who had medical problems in the past 12 months but did not go to a doctor or skipped an exam, treatment or

follow-up visit due to cost is around 11%, without significant differences between coverage groups. An average of 35.3% of the respondents said they had incurred out-of-pocket expenses in the last year, without differences between the different schemes. Of all the respondents, 11.5% had serious problems paying out-of-pocket expenses, without significant differences

Table 4.3. Financial and transportation barriers in Colombia.

CHARACTERISTICS	PUBLIC (SUBSIDIZED SCHEME) %	SOCIAL SECURITY (CONTRIBUTORY SCHEME) %	PRIVATE (%)	TOTAL (%)
Financial barriers				
Confidence in being able to pay for a treatment if necessary	53.2	53.9	66.8	54.8
Had medical problems but did not go to a doctor because of the cost	8.1	11.2	12.7	10.6
Did not go for an exam, treatment or follow-up visit due to cost	15.9	10.7	7.0	11.3
Out-of-pocket costs				
Had out-of-pocket costs	39.4	34.1	41.2	35.3
Had out-of-pocket expenses > US\$ 200	7.6	6.7	11.0	7.1
Had out-of-pocket expenses > US\$ 500	0.0	0.0	0.0	0.0
Had serious problems paying out-of-pocket expenses	15.6	10.7	9.9	11.5
Transportation barriers				
Did not see a doctor because of transportation difficulties	9.6	8.5	4.0	8.2

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

There are no statistically significant differences between the three subgroups for the variables indicated in the table.

by coverage type.¹⁰ In addition, 7.1% stated that their out-of-pocket expenses were greater than US\$ 200, but none of the groups reported that they had exceeded US\$ 500, with the average of reported out-of-pocket expenses (not counting insurance premiums), about 73,373.75 Colombian pesos.¹¹ About 8% of the sample did not visit a doctor due to transportation difficulties. There were no significant differences in this figure by coverage type.

A second important set of access barriers are those related to the organization of health services to facilitate users to use them in a manner compatible with their daily activities. Table 4.4 presents the respondents' answers about organizational barriers to accessing health services. Almost 80% reported having made at least one visit to the primary care center in the last year. This percentage was significantly higher among the respondents enrolled in social security (84.1%) compared to private insurance (69.6%) and the public system (69.5%).

Based on their experience in accessing services in primary health care, 16.5% of all respondents indicated that they had not gone for an exam, treatment or follow-up visit due to difficulties in scheduling an appointment, without any difference by scheme. The same thing does not happen in the possibility of scheduling an appointment by phone, mail or online,

which is significantly easier among people with supplemental private insurance (92.5% can schedule appointments), followed by patients who are in the contributory scheme (86.1%) and finally those in the subsidized scheme. Of the respondents who answered about the use of services outside of office hours (n=986, 68.6% of the total sample), 48.8% said that difficulties in getting medical care on evenings, weekends or holidays prevented access to care other than at the emergency room. Regarding the wait time to see a doctor or nurse the last time they needed care, 30.4% were seen the same day or the next, while 19.8% waited more than two weeks or never got care.

Experience with the use of PHC

Table 4.5 presents the results of users' experience with primary health care services. The population sample for the questions on experience with primary care is composed of those who report having a clinic or regular doctor, so that they can evaluate the entirety of care received rather than each individualized interaction. The measures of experience with the use of primary care were divided into three dimensions: (1) the alignment with a patient-centered PHC model; (2) the perception of the quality of care; and (3) the focus on the provision of patient-centered services.

Regarding the availability of patient-centered primary care, of all the respondents, just under one-third indicated having a health service and/or doctor who they go to on a regular basis. Approximately half of the sample (49.6%) indicated that telephone communication with the primary

10 The survey did not present a formal definition of "serious" problems paying out-of-pocket expenses; therefore, interpretation of the question was left up to the respondent.

11 Financial data were reported by respondents in 2013 Colombian pesos and converted to US dollars, adjusted for purchasing power parity (international dollars), in order to compare between countries.

Table 4.4. Organizational barriers and time to access primary care in Colombia.

CHARACTERISTICS	PUBLIC (SUBSIDIZED SCHEME) %	SOCIAL SECURITY (CONTRIBUTORY SCHEME) %	PRIVATE (%)	TOTAL (%)
Organizational barriers				
Visited the primary care center at least once in the last year	69.5 ^a	84.1 ^b	69.6	79.4
Did not go for an exam, treatment or follow-up due to difficulty obtaining an appointment	19.7	16.0	15.1	16.5
Appointment can be scheduled with the PC clinic by phone, mail, or online	68.1 ^{a, b}	86.1 ^b	92.5	83.7
Difficulty in obtaining medical care on evenings, weekends, or holidays prevents access to care without having to go to the emergency room	49.5	49.8	41.4	48.8
Time to access primary care provided by a doctor or nurse				
Same day or next	34.5	28.6	36.6	30.3
> 2 weeks or never	22.8	19.0	21.9	19.8

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for social security ($p < 0.05$).

b. Value differs from the result for private insurance ($p < 0.05$).

care clinic was very easy or somewhat easy. Among respondents with a PCP, 74.0% of the total said that the doctor is familiar with important information in their medical history, and less than half of patients reported that the PCP coordinated their care. The results that combine these last four variables, which are a proxy for the availability of patient-centered PHC, are quite low in all subsectors, but especially in the subsidized scheme: only 3.4% of those in the subsidized scheme, 8.6% of those

in the contributory scheme, and 10.1% of those with private insurance answered affirmatively to the four dimensions.

About the patient's experience, 75.4% said that the PCP allows them to ask questions about the recommended treatment, while 72.3% indicated that they spend enough time with the patient and 78.6% perceived that the doctor explains the situation in a way that is easy to understand. As to whether the PCP solves the majority

of health problems, 71.6% answered affirmatively. Among patients who reported taking at least one prescription medication (n=390), about 41.1% mentioned that the PCP reviewed their medications, including those prescribed by other physicians. Likewise, around 39.6% indicated that the potential side effects were explained to them.

In general, 27.8% of the sample perceived that the quality of primary care is good, with there being no significant difference between those enrolled in different schemes. In addition, 19.5% of respondents reported having had a medical problem for which it took a long time to get the proper diagnosis, also without significant difference between schemes.

Table 4.6 presents the results of prevention, detection and management of chronic diseases. With respect to whether the PCP sent a reminder for the check-up, 27.9% of the total of respondents answered affirmatively, without significant difference between schemes. Also, 23.6% of respondents indicated that the PCP discussed issues related to healthy lifestyles, such as diet, physical activity and stress factors. Of the total of respondents, close to 70% said they had had a check-up in the last two years, with a disadvantage for those in the subsidized scheme (58.6%) compared to the users of the contributory scheme (70.9%) and with those who have private insurance (72.8%).

An important measure of the quality of primary care services is the degree of compliance with preventive care norms. Due to the growing burden of chronic

diseases in the region, measures to prevent chronic diseases are particularly important. The survey asked all respondents about blood pressure and cholesterol checks, all women about Pap smear screenings, and women over 40 about mammograms. The percentage of men who reported a blood pressure check in the last year was 59.1%. Regarding a cholesterol check during the last five years, 55.6% of men answered affirmatively. Although there are no significant differences by coverage type when looking separately at these diagnostic tests, combining the two shows that the percentage of men who are up to date on the two tests is significantly lower among those in the subsidized scheme (33.6%) versus those with private insurance (43.8%). Among women, the average levels of coverage of basic exams (a total of 38.4%) are similar to men, without a statistically significant difference between the different schemes.

The percentage of women surveyed who reported cervical cancer screening using a Pap smear in the last three years was 87%, but there were significant differences between those in the subsidized scheme (76%) and those enrolled in the contributory scheme (89%) and private insurance (98.5%). The sample for mammography was restricted to women over 40 at the time of the interview. Thus, with regard to mammograms, 59% of the women surveyed indicated that they had undergone one in the last three years, without significant differences between schemes. Combining the results of the four diagnostic tests in women over 40 years old, 30.1% of adult female Colombians reported that they were up to date.

Table 4.5. Experience with primary care in Colombia.

CHARACTERISTICS	PUBLIC (SUBSIDIZED SCHEME) %	SOCIAL SECURITY (CONTRIBUTORY SCHEME) %	PRIVATE (%)	TOTAL (%)
Patient-centered PHC				
Has a doctor and/or health service that patient regularly visits	27.1	33.5	30.3	31.8
Communication with the PC clinic during the day is easy	52.6	47.0	61.5	49.6
The primary care physician (PCP) is familiar with important information about the patient's medical history	69.0	74.8	76.7	74.0
PCP helps coordinate care	39.0	43.5	59.0	44.7
Has patient-centered PHC	3.4	8.6	10.1	7.5
Patient experience				
The PCP allows the patient to ask questions about the recommended treatment	77.5	73.2	83.4	75.4
The PCP spends enough time with the patient	75.1	69.6 ^a	86.1	72.3
The PCP explains the situation in an easy-to-understand way	77.5	78.5	83.5	78.6
The PCP finds a solution to most of the patient's health problems	72.0	69.5	83.0	71.6
The PCP reviewed the patient's medications	41.0	39.2	50.8	41.1
The PCP explained the potential side effects of medications	41.6	36.6	57.5	39.6
Perception of quality				
Perception of very good quality with regard to primary-level care	24.0	26.7	38.0	27.8
Had a medical issue and it took a long time to receive an adequate diagnosis	19.2	20.5	13.2	19.5

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for private insurance ($p < 0.05$).

Table 4.6. Prevention, detection and management of chronic diseases in Colombia.

CHARACTERISTICS	PUBLIC (SUBSIDIZED SCHEME) %	SOCIAL SECURITY (CONTRIBUTORY SCHEME) %	PRIVATE (%)	TOTAL (%)
Prevention				
The PCP sent a reminder for a check-up	25.9	27.3	34.6	27.9
The PCP discussed healthy lifestyles (diet, physical activity, stress factors)	20.0	23.9	28.5	23.6
Had a preventive care visit (check-up) in the last two years	58.6 ^a	70.9	72.8	68.5
Timely screening tests in women				
Women who had their blood pressure checked in the last year	60.2	58.5 ^b	78.2	60.5
Women who had their serum cholesterol checked in the last year	51.9	52.3	66.2	53.1
Basic screening tests for women (blood pressure and cholesterol check)	39.0	36.7	54.1	38.4
Women who underwent Pap smear in the last three years	76.0 ^b	89.0	98.5	87.0
Women over age 40 who had a mammogram in the last three years	60.2	58.1	60.0	59.0
Early detection tests for women over age 40 (blood pressure, cholesterol check, Pap smear and mammogram)	30.6	27.7	46.0	30.1
Timely screening tests in men				
Men who had their blood pressure checked in the last year	53.1	58.5	69.7	59.1
Men who had their serum cholesterol checked in the last year	56.0	55.5	54.0	55.6
Basic early screening tests for men (blood pressure and cholesterol check)	33.6 ^b	38.2	43.8	38.2
Management of chronic diseases				
Has a chronic illness, has confidence that he can manage his health problems	68.2	80.7	85.2	79.1

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status. Prevalence of the variables for prevention and management of chronic diseases also sex-adjusted.

a. Value differs from the result for social security (p<0.05).

b. Value differs from the result for private insurance (p<0.05).

Access and coordination of specialty care, hospitals and emergency services with primary care

To complement the resolution capacity of primary care, it is essential to have a support network of specialty care that solves the most complex problems ideally in a coordinated manner, with defined protocols and information exchange. Table 4.7 below presents the results related to the use of specialty care, and the experience of users with referrals and counter-referrals between primary and specialty care. About 42% (n = 656) of the respondents indicated that they had consulted a specialist in the last two years. This percentage was significantly lower among subsidized scheme enrollees (33.1%), followed by 42.7% of those in the contributory scheme and 51.5% of those with private insurance. The wait time to see a specialist according to half of the respondents was two to eight weeks, without significant difference by type of scheme.

Under mechanisms to access the specialist, the majority (77.6%) indicated referrals to the specialist by the PCP. Of respondents in the subsidized scheme, 24% said that the specialist had basic medical information from the PCP about the reasons for the consultation or test results, which contrasts with 47.6% and 51.8% of the respondents affiliated with the contributory scheme and private insurance, respectively. Approximately half of those surveyed in the schemes indicated that the PCP was not informed after consultation with the specialist.

Table 4.8 presents the results of access and quality of hospitalization and emergency services. A small number of respondents (n = 215 or 13.5%) required hospitalization in the last two years, without significant difference by coverage type. Of these, 18.0% indicated that they had been readmitted after having been discharged or that they had to go to the emergency room. The percentage was significantly lower those with private insurance (0.6%) compared to those in the subsidized scheme (19.0%) and the contributory scheme (24.4%). The vast majority of respondents (80.0%) stated that hospital staff provided information on the medication received at discharge, as well as written information on self-care (81.1%). A lower percentage (64.8%) indicated that the hospital staff helped them coordinate a follow-up visit with their health provider.

For all regimens, 46.2% of respondents said they had gone to the emergency department in the last two years, and more than half believed that they used emergency services for conditions that could have been treated at the primary level. Only 14.9% reported having been hospitalized or referred to another clinic.

Discussion

The degree of satisfaction and confidence that Colombians indicated regarding the health system is not high and the vast majority consider it necessary to make a change. The period of the survey coincides with a time of operational and managerial crisis in the health sector, characterized by liquidity problems, which in many cases are reflected in

Table 4.7. Access to specialty care and coordination with primary care in Colombia.

CHARACTERISTICS	PUBLIC (SUBSIDIZED SCHEME) %	SOCIAL SECURITY (CONTRIBUTORY SCHEME) %	PRIVATE (%)	TOTAL (%)
Access to specialty care				
Consulted with a specialist in the last two years	33.1 ^b	42.7	51.5	42.2
Wait time for a consultation with the specialist				
< 2 weeks	32.3	20.3 ^b	41.0	24.1
Between 2 and 8 weeks	58.6	48.8	38.9	49.3
> 8 weeks	6.8 ^a	25.5	16.2	18.9
Coordination between PHC and specialty care				
It is necessary to ask for a referral for specialty care	75.9	84.2	69.1	81.0
The referral process was carried out by the doctor from the regular place of care	74.8	83.7 ^b	51.3	77.6
The referral process was performed by a doctor who is not from the regular place of care or the emergency room	8.8	6.4	13.6	7.1
The specialist had basic medical information from the regular PCP about the reason for the patient's consultation or test results.	24.0 ^{a, b}	47.6	51.8	44.2
After consultation with the specialist, the regular PCP was informed about the recommendations made by the specialist	46.2	51.5	55.5	51.2

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for social security ($p < 0.05$).

b. Value differs from the result for private insurance ($p < 0.05$).

Table 4.8. Need for hospitalizations and use of emergency services in Colombia.

CHARACTERISTICS	PUBLIC (SUBSIDIZED SCHEME) %	SOCIAL SECURITY (CONTRIBUTORY SCHEME) %	PRIVATE (%)	TOTAL (%)
Hospitalization				
Required hospitalization in the last two years	11.1	14.6	10.2	13.5
After discharge, patient was readmitted or had to go to the emergency room	19.0 ^a	24.4 ^a	0.6	18.0
Hospital staff provided information about medication upon discharge	67.2 ^a	81.8 ^a	100.0	80.0
Hospital staff helped coordinate a follow-up consultation	53.5	68.4	68.4	64.8
The hospital staff provided written information about self-care	70.3	85.0	72.7	81.1
Emergency department				
Used the emergency room in the last two years	45.0	46.3	47.5	46.2
Considers that he used the emergency room for conditions that could have been treated at the primary level	44.0	55.2 ^a	33.9	50.3
After being evaluated by the emergency room, he was hospitalized or referred to another medical clinic	16.1	14.3	17.7	14.9
After being evaluated in the emergency department, the patient was discharged	82.1	84.0	80.7	83.4

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for private insurance (p<0.05).

deficient care to users, corruption and inefficiency in the use of resources, of enormous legal and fiscal pressure on the system (Fedesarrollo 2013). The influence of the media as a factor that explains perceptions about the health system has been demonstrated in the literature (Feo-Acevedo and Feo-Istúriz 2013), making these results plausible.

Likewise, the general perception about the quality of primary care is not favorable either, especially in the public system and in social security. This contrasts with the fact that the majority of respondents realize that indicators of an adequate quality of the interaction with the PCP are largely fulfilled, with the exception of medication management. This discrepancy suggests that users may not know the importance of or value these aspects of primary care as part of their general appraisal. Therefore, the survey results may point to the need to inform the user about these aspects through good communication campaigns, both at a national level and in the EPS and IPS. In addition, it is possible that the negative opinion that the user has about the system in general (as demonstrated in table 4.2) affects the perception of the quality of primary care.

Regarding access barriers, the results corroborate that financial protection policies have been successful, as documented in the international literature (Bonet-Morón 2015). However, the fact that there are differences between schemes with regard to skipping an exam, treatment or follow-up visit due to cost is eye opening and calls for examining aspects of resource funding that may be failing when delivering care in the subsidized scheme. The fact that there is a proportion of respondents that face

transportation barriers could indicate that the location of the supply in relation to demand catchment areas is an aspect that could be improved.

According to this survey, organizational barriers are the main impediment to accessing services. There is room to improve in terms of the timeliness of appointments and availability of hours compatible with Colombians' daily activities. In this sense, this may be a manifestation of weaknesses in the country's PHC management models, as indicated by some authors (Giovannella *et al.* 2015). The survey indicates that improvements could be made in communication with providers and in technology (for example, availability of online appointments) to make it easier to schedule appointments. The coordination problems are also notable, given that the proportion of respondents that indicates that the PCP coordinates care is less than half, and even less for social security users. This lack of coordination is a result that can be related to a high level of fragmentation within Colombia's health system, which has already been recognized in system evaluations (Giovannella *et al.* 2015), with weaknesses in referral and counter-referral protocols, as well as administrative processes to authorize procedures, referrals and other services (Rodríguez-Hernández 2015).

In general, the health system does not seem to be very proactive in implementing prevention and promoting healthy lifestyles. According to the goals established in the national clinical practice guidelines, the screening rates for blood pressure and cholesterol, as well as mammography rates for women, could be higher (MSPS 2013; INC 2012). This issue is deserving of measures to facilitate compliance with

existing national protocols by suppliers, and to evaluate in depth the problems when accessing these services. On a different note, the rate of Pap smears reported is higher than blood pressure and cholesterol checks, which are relatively simple tests, suggesting that the steps taken by the country in terms of cervical cancer screening are functioning but there are missed opportunities to screen for other chronic diseases. Among people who already indicate that they have been diagnosed with a chronic disease, most feel confident that they can handle their health problems well, which coincides with the good perception that has been reported about the interaction with the PCP. This could also reflect the perception that the patient has about being able to access health services and receive instructions.

It is a good indication that a high proportion of the population consulted a PCP in the last year, although it was lower in the case of those with public insurance. This same group also recorded lower access to a specialty consultation in the last two years. It seems plausible that the lowest figures for the respondents in the subsidized regime are secondary to the fact that this group is on average younger and has fewer chronic diseases. Similarly, there are other factors that could be involved, such as economic barriers to attending a routine exam (see table 4.3), or a lower education level that in turn leads to seeking fewer check-ups (as shown in table 4.6). In addition, it is not surprising that the number of consultations is higher for those with supplemental private insurance, since even accessing these services can be a motivation to pay for this benefit.

With regard to scheduling appointments, the long wait times to access a specialty consultation suggest lack of supply and/or

failures in the referral process. The results at the hospital level imply, as has been discussed previously, that there are aspects to improve on in the follow-up, coordination and coordination of hospital discharge, such as the fact that there is a percentage of patients for whom the hospital did not schedule a follow-up appointment.

One disturbing finding is that almost half of the population says they have used the emergency department in the last two years. As a basis for comparison, the EPS Service Evaluation Study conducted with users of the contributory and subsidized regimes in 2014 revealed that 27% of the population had resorted to using the emergency room in the last six months (Infométrika 2014). Thus, the rate found is above many of the OECD countries investigated through the Commonwealth Survey (Osborn 2011), as well as above the other LAC countries that participated in this study. Taking into account the percentage of users who had to wait more than the three days specified by law to access a primary care consultation (DAFP 2012), and considering the coordination difficulties if the problem requires specialty services, it makes sense that users in Colombia turn to emergency services as a more convenient option for them, even at the expense of the efficiency of the health system.

To validate the results of this survey in the Colombian context, we find ourselves up against the limitation that studies on the performance of the country's health system—particularly from the user's perspective—are scarce and have been carried out with different methodologies. However, our findings generally coincide with the direction of the assessments (positive/negative) of some similar dimensions that have been measured by

other investigations, as described below. For example, the Ombudsman's Office carried out surveys of EPS users in 2009–2010 (Defensoría 2010). Respondents were asked to rate different aspects of care between 0 and 100, including the ease of access to health services and the timeliness of the care provided. In 2009, the dimension of accessibility received an average score of 74 points, and within that dimension, the items with unsatisfactory ratings were those related to information on the network of providers, the services to which users are entitled, and the invitation to health promotion and prevention programs. Timeliness received a rating of 80%, in which users reported an average delay of five days in receiving general medical care. The results of this survey also reflected the use of the emergency room as a gateway to health services, as well as perceptions of a lack of coordination between EPSs and clinics.

Other indicators on the perspective of EPS and IPS users between the 2013–2014 period are published in the National Health Quality Report (MSPS 2014). They are based on a national survey conducted by the MSPS of people who have used health services in the six months prior to the survey. In the case of EPS users, 70% rated their overall experience with the services received as very good or good. The quality of treatment and care was also evaluated favorably by the users, with 85% considering it as very good or good. It is worth noting that the level of satisfaction of the users in said survey refers to the rating of the EPS/IPS, not the system.

Finally, there is information from the Public Perception Surveys that, among other topics, periodically inquire about the public's opinion on health issues. This is the case of the "How Are We Doing?"

survey, conducted in 2012 across ten cities in Colombia, with a sample that, by city, was about 1,150 men and women over age 18 (Queen 2014). This survey found that more than 95% of the population that required medical care actually received it, that the average wait time for appointments is from one to five days, and that 56.3% of people feel satisfied with the care received. However, when evaluating changes in these indicators over the last five years, there was an increase in the perception of wait time for an appointment, as well as a reduction in the percentage of people satisfied with health services, with some differences according to socioeconomic status. Regarding access barriers, between 2008 and 2012 an increase in the consequences of supply-side barriers (attributed to the operation of the health service) is noted. Looking at the numbers, in the cities studied, 73.5% of the reasons cited for non-utilization of the health service in 2008 were related to demand-side barriers, a figure that fell to 61.2% in 2012. Alternatively, the percentage corresponding to barriers on the supply side rose from 22.6% to 35.9%.

Conclusions

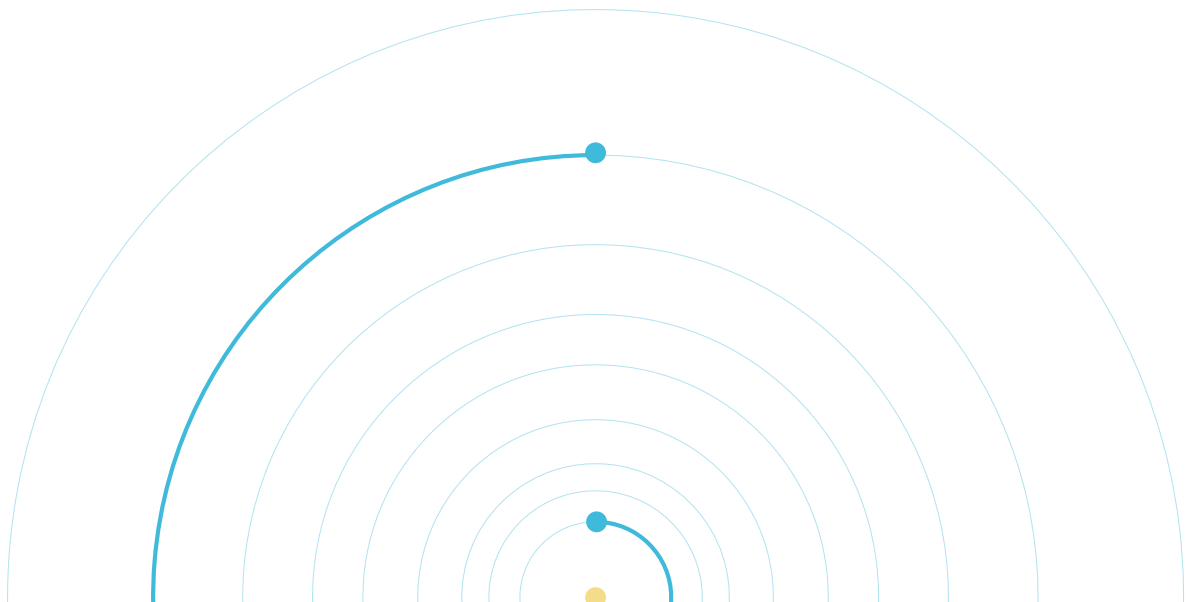
Despite the important achievements of the SGSSS in the last 20 years in terms of enrollment—particularly among low-income populations—there are indications that effective access, the resolution capacity of services, and the quality of care have not evolved along with the requirements to reach universal coverage (MSPS 2016b). At the time of conception of the care model, the expectation was that the EPSs would have economic incentives to organize service delivery into networks with different levels of care with primary care

as a gateway, promoting and maintaining health throughout of a continuum of care (Londoño 1997). However, throughout the reform, no real incentives have been generated for the development of a model of this nature, with obstacles to this being fragmentation of supply, a persistent orientation towards curative care, limited resolution capacity and ability to monitor and enforce the regulatory framework (Giovannella *et al.* 2015). Since 2011, the national government has advanced reform initiatives to give prominence to the role of primary care, with examples of this being Law 1438 of 2011 and the passage of the Comprehensive Health Care Policy (PAIS) in 2016 (MSPS 2016b).

The results of this survey are particularly relevant to the current Colombian context, as they capture the fundamental elements of the patient's experience with primary care and its relationship with subsequent levels of care (Macinko *et al.* 2016). In addition, its focus on the measurement of quality of care is not only based on results

but also on care processes. Having the public's perspective provides information on potential areas for improvement, which must be accounted for when planning the implementation of care model reforms.

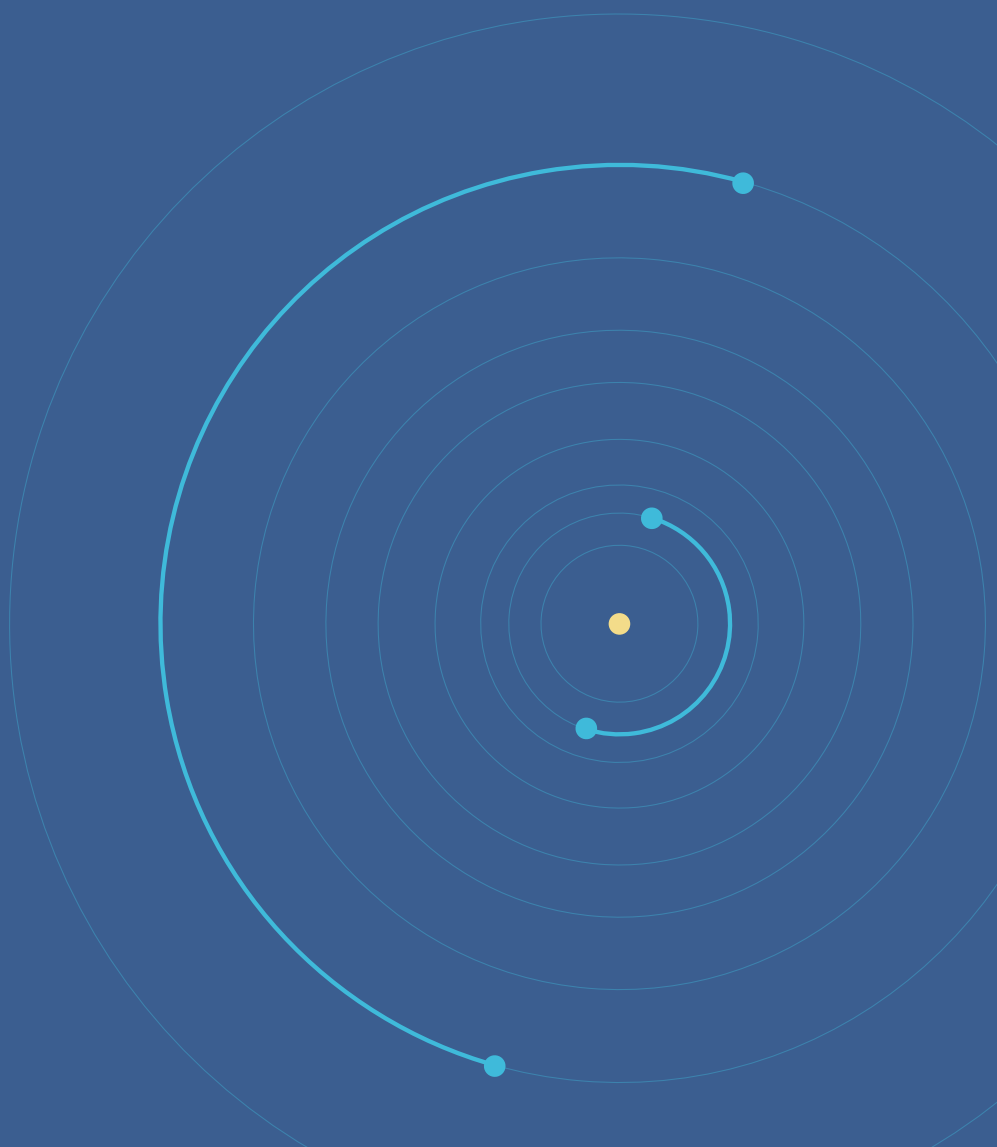
Two areas of action stand out. First, it is important for the country to continue working to close the coordination gaps in the health system and to take measures to ensure that the quality of health care is really high, both for the users of the subsidized and contributory schemes (Vargas *et al.* 2017). The information from the National Quality Observatory is a useful input in the definition of interventions to improve quality (MSPS 2016c). Secondly, the definition and implementation at the national level of a clearer primary care model, with goals and performance indicators, seems to be a good starting point to initiate such an effort in health policies. This first step has been taken with the passage of the Comprehensive Health Care Model (MAIS).



The Experience with Primary Health Care in El Salvador

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5





Epidemiological profile and characteristics of El Salvador's health system

In 2015, El Salvador recorded a per capita GDP of US\$ 4,219, which places the country below the regional average in terms of income level while average annual growth was 2.0% in the last five years (WB 2017). The levels of poverty and inequality have been steadily falling in the 20 years since the end of the civil war in 1992, and in 2014 around 3% of the population had a daily income of less than US\$ 3.10, adjusted for purchasing power parity. In 2014, total health spending in El Salvador was 6.8% of GDP, around US\$ 280 per person, while government health expenditure was 4.5%, approximately US\$ 185 per person (WHO 2017). In terms of total health expenditure, 66% was public and 34% was private, with out-of-pocket spending corresponding to 28.9% of the total expenditure.

Like most countries in the LAC region, as well as those that are included in this study, El Salvador is in a process of demographic and epidemiological transition. In the last 14 years, life expectancy at birth has increased four years, and according to indicators for 2014, Salvadoran women and men can expect to live 77.4 and 68.3 years, respectively (BM 2017). In turn, the proportion of adults over 65 is growing at a rate higher than that of the total population. In El Salvador, this age group is expected to increase from 5% in 2000 to 15.5% in 2050, positioning El Salvador as a country with more than 1.6 million older adults.

According to 2015 data from the IHME, the burden of disease, measured in DALYs, attributed to NCDs is 64.9%, 21.7% for injuries, and 13.4% for infectious and maternal and child diseases (IHME 2015). The burden of NCDs and injuries is on the rise, displacing infectious and maternal and infant diseases. The following NCDs predominate: cardiovascular diseases (10.1% of total DALYs); mental disorders and substance use (9.8%); different types of cancer (7.3%); other non-communicable diseases (9.7%); and diabetes, urogenital, hematological and endocrine diseases (11.0%). Among the main risk factors for NCDs are high systolic blood pressure (14.5% of total risk attributable to DALYs), high body mass index (12.4%), high fasting plasma glucose (13.1%), compromised kidney function (9.5%), and alcohol use (6.0%).

The increase in the prevalence of chronic conditions presents a challenge for the functioning of health services. Dealing with this new disease profile requires an increase in the resolution capacities of services of the primary level of care, together with the management of complex and comprehensive service networks, an effort that the government has been undertaking in recent years (Legislative Assembly of El Salvador 2007). However, to date there are few sources of information about the performance of health services in the country, especially from the patient's perspective.

The National Health System (NHS) was created through the Law for the Establishment of the National Health System of 2007, in which the Ministry of Health (MINSAL) is named as the governing entity of the system and its

constituent institutions (Legislative Assembly of El Salvador 2007). The health system of El Salvador is segmented into public and private subsystems.

The public subsystem is called the National Health System in the Law for the Establishment of the National Health System, and its main components are the following: (a) the Ministry of Health, which is responsible for the care of the population not covered by social security institutions or special schemes, approximately 73% of the total population, some 4.5 million people; and (b) the Salvadoran Social Security Institute (ISSS), which covers 24% of the population—public and private sector workers with formal employment, their spouses and children under 12, and ISSS pensioners. The main source of financing for the ISSS is payroll taxes on formal workers, distributed among employers and employees up to a predefined limit (Acosta *et al.* 2011). MINSAL benefits are financed by government funds from general taxes (Guerrero *et al.* 2011). Another 1.7% of the population is covered by the Salvadoran Institute for Teachers' Welfare and the Military Health Command, which are programs with a clearly defined target population (teachers and military personnel, respectively, together with their families). The Solidarity Fund for Health offers health services framed mainly in programs associated with the management and prevention of smoking and addictions and emergency and disaster relief, but it also provides health coverage to the general population at MINSAL clinics outside of regular office hours (evenings, holidays, etc.) with its own personnel and pharmacy, among others (Acosta *et al.* 2011). Each of the system's institutions organizes service delivery with its own network or through the purchase of services.

In 2009, El Salvador initiated a process of health sector reform with the main objective of achieving universal coverage (Rodríguez 2010). The existing model of care prior to the health reform was based on a combination of contracts with non-governmental organizations (NGOs) and institutional staff for the delivery of a basic package of preventive health, nutrition and family planning services. The 2009 reform is directed toward the implementation of a model of care with a focus on family health, with prevention, health promotion and service delivery through Family Community Health Teams as the main components. Other elements of the reform include the introduction of free services at all public facilities.

In its conception, MINSAL's service delivery is organized according to the model of Comprehensive and Integrated Health Care Service Networks (RIISS) and has a clear vision about the role of primary health care, which must be resolute and serve as a gateway for the rest of the network. The model defines the primary level of care as the point of entry to the system and that its continuity will be provided through a system of referrals and counter-referrals. To achieve this, the Comprehensive Health Care Model has been established, using Community Family Health Teams (ECOS-F) composed of medical personnel, nurses, nursing assistants and health promoters to bring health services to the community and Specialized Community Health Teams (ECOS-E)¹² (Rodríguez 2009). Each ECOS

serves an average of 600 families in rural areas and 1,800 in urban areas, part of the preparation of a map and a health profile of each family served. According to ECOS guidelines, the doctor and nurse must provide a consultation at the basic Community Family Health Clinic (UCSF) three days a week and make home visits the remaining two days, always guaranteeing the presence of the doctor or nurse at the clinic. ECOS guidelines establish a monitoring plan for individuals according to their age and risk profile, taking into account specific conditions such as pregnancy or chronic diseases, the physical environment of the home and access to services. The specialized ECOSs serve an average of 6,000 families in rural areas and 8,000 in urban areas. In turn, the ECOSs are linked to the aforementioned Community Family Health Clinics.

Although this is organized based on a solid conceptual model of comprehensive networks and primary care, to date there are no empirical studies in El Salvador that capture the fundamental elements of primary care and its relationship with subsequent levels of care beyond the administrative systems. Therefore, the results of the administration of a variation of the Commonwealth Survey in the country offer a first look to characterize the country's health system based on efforts undertaken following the 2009 reforms.

Below, we present the results obtained on the general perceptions of health system users in El Salvador, financial and physical access to health services, perceptions of primary care quality, and data about specialty care, in addition to results related to the use of emergency and hospital services. We discuss what these data mean in the context of El Salvador, and what can they tell us about the gaps that exist in the

12 The ECOS-E staff consists of a pediatrician, an obstetrician/gynecologist, an internist, a nurse, a nursing assistant, three dentists, a physical therapist, two laboratory technicians, a health educator, a statistical assistant, and a driver.

health system and the inequalities between the main subsystems: (a) the social security system ISSS, financed by payroll taxes on formal workers; (b) public insurance through MINSAL, whose benefits are predominantly financed by general taxes and include the poorest people and informal workers; and (c) those who decide to acquire supplemental private insurance, regardless of their enrollment in one of the two government subsystems. To facilitate reading and comparability among the six countries included in the 2013 version of the survey in LAC, this chapter uses the term “social security” in reference to ISSS enrollees, “public” in reference to those without social security or private insurance, and “private” in reference to those with a private plan, whether as a supplement to social security or not.

Characteristics of the sample and general perceptions about the health system

The sample included 1,500 respondents with valid data, who were contacted by landline and mobile phone in 2013. To obtain a better approximation of national representativeness, sample weights were applied during data analysis to reflect a figure close to the country’s adult population.¹³ Table 5.1 presents the general characteristics of the population under study.

The weighted percentage with public coverage is 43.1%; with social insurance,

46.7%; and with private insurance, 10.2%. In total, 46.2% of the sample participants are male. Social security system users are, on average, slightly older than those of the other schemes: 54.8% over age 35, as compared to 46.6% and 37.6% for public and private coverage, respectively. The proportion of respondents with an education level of primary school or lower is 42.8% of the total sample, with a figure significantly higher for public system beneficiaries (51.3%), as compared to social security beneficiaries (36.7%) and those with private insurance (35.8%). The percentage of respondents with at least one chronic disease is 30.2%, a figure that is similar for the three coverage categories. However, users of the public system more frequently indicate a low subjective perception of health status (22.6%) compared to 18.8% of the total number of respondents.

Table 5.2 presents the population’s perceptions of the health system. Only 9.8% of the respondents believe that the health system works well and that only minor changes are needed. The majority of the sample (52.5%) indicated that the health system has some positive aspects but that fundamental changes are needed to make it work better. A substantial proportion of the sample (35%) believes that there are so many problems in the health system that it has to be completely overhauled, without statistically significant differences between coverage schemes. Therefore, it is not surprising that the confidence in receiving the most effective treatment—including drugs and diagnostic tests—would not be very high either, at 56.2%.

¹³ For more details about the methodological design, see chapter 2.

Table 5.1. General characteristics of the sample by type of coverage in El Salvador.¹⁴

CHARACTERISTICS	PUBLIC	SOCIAL SECURITY	PRIVATE	TOTAL
Number of respondents (n)	628	684	148	1,460
Weighting (%)	43.1	46.7	10.2	100.0
Sex (%)				
Women	58.7 ^a	49.0	55.0	53.8
Age (%)				
18-25	31.2 ^a	19.9 ^b	37.1	26.6
26-35	22.2	25.3	25.4	24.0
36-45	16.6	20.2	16.7	18.3
46-59	17.8	17.5	13.1	17.2
60+	12.2 ^a	17.0 ^b	7.8	14.0
Education (%)				
Primary	51.3 ^{a, b}	36.7	35.8	42.8
Secondary	31.7	32.3	34.8	32.3
University	17.0 ^{a, b}	31.0	29.4	24.9
Health status (%)				
At least one chronic disease	31.1	29.4	30.6	30.2
Two or more chronic diseases	15.8	14.5	16.0	15.2
Low subjective perception of health status	22.6 ^a	16.3 ^b	14.3	18.8

Notes:

a. Value differs from the result for social security ($p < 0.05$).

b. Value differs from the result for private insurance ($p < 0.05$).

¹⁴ All of the results presented in the tables, except for the number of respondents, use sample weights for national population representativeness.

Table 5.2. Perceptions and confidence in the health system in El Salvador.

CHARACTERISTICS	PUBLIC (%)	SOCIAL SECURITY (%)	PRIVATE (%)	TOTAL (%)
Perceptions				
The system works quite well and only minor changes are needed to make it work better	7.4	12.0	11.0	9.8
Our health system has some positive aspects, but fundamental changes are needed to make it work better	50.9	50.7	59.0	52.5
There are so many problems in our health system that we must completely overhaul it	39.8	35.1	28.0	35.0
Confidence				
Confidence in receiving the most effective treatment, including medications and diagnostic tests	52.1	59.7	56.4	56.2

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

There are no statistically significant differences between the three subgroups for the variables indicated in the table.

Barriers to access services

Confidence in being able to pay for treatment is low, with only 38.7% of respondents feeling confident. Considering that the public system provides free services to the population in need, the low confidence in being able to pay suggests that there may be indirect costs that generate a barrier to access to services or lack of education on the part of the public with regard to how public services operate.

Considering the high rate of respondents who do not have confidence in being able to pay for the necessary treatment, it is

to be expected that significant financial barriers will also be reported. For example, 27.3% of respondents said they had medical problems but did not go to the doctor because of the cost. In addition, 24.4% of the sample indicates having skipped an exam, treatment or follow-up visit due to cost, in this case without a marked difference by type of coverage. The vast majority (78.2%) said they had incurred out-of-pocket expenses, also without differences by coverage type. Of all the respondents, 21.3% had serious problems paying out-of-pocket expenses,¹⁵

¹⁵ The survey did not present a formal definition of "serious" problems paying out-of-pocket expenses;

with 46.0% saying they were more than US\$ 200 and 27.7% noting that they exceeded US\$ 500, with some significant difference between the schemes (31.3% for the public system, 20.8% for social security and 40.2% for private insurance).¹⁶ Lastly, 15.4% of the sample did not visit a doctor due to transportation difficulties. Table 5.3 below presents the respondents' answers about financial and transportation barriers in accessing health services.

Organizational issues represent a very important barrier to access to PHC in El Salvador, especially for public system users. Of respondents with social security, 67.0% said they had made at least one visit to the primary care center in the last year, compared to the significantly lower value of 62.0% for those in the public group and 62.8% for those with private insurance. Furthermore, 21.1% of the sample indicates having skipped an exam, treatment or follow-up visit due to difficulty obtaining an appointment. Also, 36.8% of respondents indicate that they waited more than two weeks or that they never managed to see a doctor or a nurse, without significant differences between the schemes. Access to appointments by telephone, mail or online is low in all groups, especially among users of public insurance (20.2%) and social insurance (20.8%). What is more, 75.2% of respondents report that the difficulties in obtaining medical care on evenings, weekends, or holidays prevent access to care without having to go to an emergency

room (78.6% of public system users, 74.1% of social security beneficiaries, and 66.1% of those with private insurance). Table 5.4 presents respondents' answers about organizational barriers to accessing health services.

Experience with the use of PHC

Table 5.5 presents the results of users' experience with primary health care services. The population sample for the questions on experience with primary care is composed of those who report having a clinic or regular doctor, so that they can evaluate the entirety of care received rather than each individualized interaction. The measures of experience with the use of primary care were divided into three dimensions: (1) the alignment with a patient-centered PHC model; (2) the perception of the quality of care; and (3) the focus on the provision of patient-centered services.

In El Salvador, very few respondents mention having patient-centered primary care, especially users from the public group. The percentage that indicates having access to a regular clinic or doctor is low for the entire sample, but especially among users of the public system (only 28.3%), as compared to 38.7% of those with social security and 42.7% of those with private insurance. 53.9% of respondents report that communication with the PHC clinic during the day seems difficult. The majority of respondents from the three groups (67.3%) indicate that the PCP is familiar with important information about the patient's medical history. The perceptions of the PCP's

therefore, interpretation of the question was left up to the respondent.

¹⁶ Financial data were reported by respondents in 2013 US dollars and converted to US dollars, adjusted for purchasing power parity (international dollars), in order to compare between countries.

Table 5.3. Financial and transportation barriers in El Salvador.

CHARACTERISTICS	PUBLIC (%)	SOCIAL SECURITY (%)	PRIVATE (%)	TOTAL (%)
Financial barriers				
Confidence in being able to pay for a treatment if necessary	35.9	44.1	35.0	38.7
Had medical problems but did not go to a doctor because of the cost	30.8	26.4	24.1	27.3
Did not go for an exam, treatment or follow-up visit due to cost	28.8	24.0	19.1	24.4
Out-of-pocket costs				
Had out-of-pocket costs	81.0	74.9	82.0	78.2
Had out-of-pocket expenses > US\$ 200	50.3	38.6 ^a	58.3	46.0
Had out-of-pocket expenses > US\$ 500	31.3	20.8 ^a	40.2	27.7
Had serious problems paying out-of-pocket expenses	26.1	19.4	18.3	21.3
Transportation barriers				
Did not see a doctor because of transportation difficulties	15.7	15.1	14.1	15.4

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.
^a Value differs from the result for private insurance ($p < 0.05$).

ability to coordinate care are very low: only 31.2% of those in the public coverage group considered it positive, although it seems to have been somewhat better for those in the social security group (44.2%) and for those with private insurance (52.7%). This may indicate a lack of integration, suggesting that PCPs are not fulfilling their function as a gateway to the health system. The results reported for the availability of patient-centered

PHC—that is, the set of the four previous variables—in the public, social and private insurance groups were only 5.0%, 9.4% and 13.6%, respectively.

71.2% of the total respondents indicated that the PCP allows them to ask questions about the recommended treatment, without significant difference by coverage type. There is a more marked difference between the groups with respect to the

Table 5.4. Organizational barriers and time to access primary care in El Salvador.

CHARACTERISTICS	PUBLIC (%)	SOCIAL SECURITY (%)	PRIVATE (%)	TOTAL (%)
Organizational barriers				
Visited the primary care center at least once in the last year	62.0 ^a	73.8	62.8	67.0
Did not go for an exam, treatment or follow-up visit due to difficulty obtaining an appointment	21.8	22.1	17.7	21.1
Appointment can be scheduled with the PC clinic by phone, mail, or online	20.2	20.8	29.3	22.4
Difficulty in obtaining medical attention on evenings, weekends, or holidays prevents access to care without having to go to the emergency room	78.6 ^b	74.1	66.1	74.2
Time to access primary care provided by a doctor or nurse				
Same day or next	36.7	40.9	47.5	40.8
> 2 weeks or never	38.3	36.4	35.0	36.8

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for social security ($p < 0.05$).

b. Value differs from the result for private insurance ($p < 0.05$).

question of whether the PCP spends enough time with the patient. Only 51.7% of those with public coverage responded affirmatively, compared with 63.4% of those in the social security group and 62.2% of those with private insurance. We see this same trend with the variable PCP explained the situation in a way that is easy to understand. 63.5% of those in the public group answered yes, compared to 74.4% of those in the social security group and 75.8% of those with private

insurance. Despite the aforementioned problems with primary care, the majority of respondents (70.4%) note that the PCP solves the majority of health problems, without significant difference by type of scheme. Regarding medications, 54.3% of respondents report that the doctor reviewed them, including those prescribed by others. 45.1% of those in the public coverage group indicate that the doctor told them about the side effects of drugs, a significantly lower percentage compared to

66.3% of those in the social security group and 69.0% of those with private insurance.

We found that 57.4% of private system users indicated that they had a very good perception of primary care, compared with public system (43.3%) and social security (42.5%) beneficiaries. This may also be attributed to the fact that the users of different systems have different expectations. Another quality indicator from the patient's perspective is the percentage of respondents who had a medical problem and took a long time to get the proper diagnosis—22.0%, without any difference by coverage type.

An important measure of the quality of primary care services is the degree of compliance with preventive care norms. Due to the growing burden of chronic diseases in the region, measures to prevent chronic diseases are particularly important. Table 5.6 presents the results of prevention, detection and management of chronic diseases.

Of the total of respondents, 58.5% reported having gone for a check-up in the last two years; however, there is a gradient between the three groups: 50.2% for public insurance, 56.7% for private insurance, and 66% for social insurance. Blood pressure monitoring rates in the last year are higher for women than for men. There are also differences by type of coverage, with higher rates of monitoring in the social security system compared to the public group, both for men and women. In total, 53.1% of men reported having their blood pressure checked in the last year, compared to 75.6% of women. Although just 45.9% of men in the public coverage group reported having their blood pressure checked in the last year, this number is significantly different for men in the social

security group (60.5%), while those with private insurance yielded 49.7%. With respect to women, 72.5% of those in the public coverage group report having their blood pressure checked in the last year, while this percentage is 78.4% for social security and 74.9% for those with private insurance, without statistical differences for the three groups. 29.3% of men in the public coverage group say they have had their cholesterol checked in the last five years, compared to 44.9% of those in the social security group and 43.5% of those with private insurance. The same trend is observed among women: 35.6% of the public coverage group reports a cholesterol check in the last two years, while among social security beneficiaries it was 46.8% and those with private insurance, 38.4%.

60.0% of the women surveyed reported having a Pap test in the last five years, while 53.3% of women over 40 reported having had a mammogram in the last three years. Regarding access to mammograms, there is a significant difference between public insurance and social security (29.3% versus 44.9%, respectively).

Access and coordination of specialty care, hospitals and emergency services with primary care

Table 5.7 presents the results related to the use of specialty care, and the experience of users with referrals and counter-referrals between primary and specialty care.

Table 5.5. Experience with primary care in El Salvador.

CHARACTERISTICS	PUBLIC (%)	SOCIAL SECURITY (%)	PRIVATE (%)	TOTAL (%)
Patient-centered PHC				
Has a doctor and/or health service that patient regularly visits	28.3 ^{a, b}	38.7	42.7	35.5
Communication with the PC clinic during the day is easy	42.3 ^b	52.3 ^b	68.5	53.9
The primary care physician (PCP) is familiar with important information about the patient's medical history	61.2	71.0	70.3	67.3
PCP helps coordinate care	31.2 ^{a, b}	44.2	52.7	41.6
Has patient-centered PHC	5.0 ^b	9.4	13.6	8.1
Patient experience				
The PCP allows the patient to ask questions about the recommended treatment	65.0	74.3	74.0	71.2
The PCP spends enough time with the patient	51.7	63.4	62.2	59.5
The PCP explains the situation in an easy-to-understand way	63.5	74.4	75.8	71.2
The PCP finds a solution to most of the patient's health problems	64.5	74.1	71.3	70.4
The PCP reviewed the patient's medications	46.3	61.1	56.9	54.3
The PCP explained the potential side effects of medications	45.1 ^a	66.3	69.0	58.4
Perception of quality				
Perception of very good quality with regard to primary-level care	43.3	42.5	57.4	45.5
Had a medical issue and it took a long time to receive an adequate diagnosis	22.1	23.5	18.9	22.0

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for social security ($p < 0.05$).

b. Value differs from the result for private insurance ($p < 0.05$).

Table 5.6. Prevention, detection and management of chronic diseases in El Salvador.

CHARACTERISTICS	PUBLIC (%)	SOCIAL SECURITY (%)	PRIVATE (%)	TOTAL (%)
Prevention				
The PCP sent a reminder for a check-up	35.5	35.6	32.0	34.9
The PCP discussed healthy lifestyles (diet, physical activity, stress factors)	32.1 ^a	43.3 ^b	28.2	35.6
Had a preventive care visit (check-up) in the last two years	50.2 ^a	66.0	59.7	58.5
Timely screening tests in women				
Women who had their blood pressure checked in the last year	72.5	78.4	74.9	75.6
Women who had their serum cholesterol checked in the last year	35.6	46.8	38.4	40.2
Basic screening tests for women (blood pressure and cholesterol check)	29.7	41.3	32.6	34.4
Women who underwent Pap smear in the last three years	54.7	65.0	59.6	60.0
Women over age 40 who had a mammogram in the last three years	40.6 ^a	65.7	48.0	53.3
Early detection tests for women over age 40 (blood pressure, cholesterol check, Pap smear and mammogram)	16.9	32.1	18.1	22.5
Timely screening tests in men				
Men who had their blood pressure checked in the last year	45.9 ^a	60.5	49.7	53.1
Men who had their serum cholesterol checked in the last year	29.3 ^a	44.9	43.5	38.6
Basic early screening tests for men (blood pressure and cholesterol check)	21.8	33.2	28.7	28.2
Management of chronic diseases				
Has a chronic illness, has confidence that he can manage his health problems	77.4 ^a	94.9 ^b	75.0	82.9

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status. Prevalence of the variables for prevention and management of chronic diseases also sex-adjusted.

a. Value differs from the result for social security ($p < 0.05$).

b. Value differs from the result for private insurance ($p < 0.05$).

In terms of specialty care, only 20.7% of respondents indicated that they had consulted a specialist in the last two years, with no significant difference by type of scheme. The majority were referred by a doctor from their regular place of care, 69.2% in the case of the public coverage group, 81.6% for the social security group, and 51.6% of those with private insurance. A little more than half of the people who saw a specialist (54.9%) report a wait time of eight weeks or less.

According to the three coverage groups, there are no significant differences in the flow of information between the PCP and the specialist. 60.0% of respondents indicated that the specialist had basic medical information from the PCP about the reasons for the consultation, and 52.3% stated that after the visit to the specialist, their regular PCP was informed.

Table 5.8 presents the results related to the utilization of hospitalization and emergency services. 5.2% of the sample reports having been hospitalized in the last two years, with no difference by type of scheme. The majority of patients (79.8%) stated that the hospital staff gave them information about the medication they were taking when they were discharged, with a similar figure for all three schemes. Most also report coordination of a follow-up consultation with their health provider by hospital staff (72%). There was not much difference between groups with regard to receiving written information about self-care: 72.6% of those in the public group answered yes, compared to 78% of those in the social security group and 100% of those with private insurance.

14.4% of respondents report having gone to the emergency department in the last two years, a percentage that is similar

for the three schemes. Just over 40% of respondents indicated that they had used it for conditions that could have been treated at the primary level. The majority of patients in all three schemes were discharged after going to the emergency room.

Discussion

Most Salvadorans report a medium level of satisfaction with the health system, although the gradient of complacency among users of the public system, social security and the private system is increasing. The proportion of people reporting financial barriers to access is higher among users of the public system, followed by social security users. In spite of recent reforms that had free public health services as one of its pillars, the number of people who report having incurred out-of-pocket expenses continues to be high, as well as the average amounts indicated by respondents. There may be indirect costs associated with the use of health services that are being reported as out-of-pocket expenses. One study on the universal basic pension¹⁷ finds an increase in the utilization of health services among beneficiaries, which suggests that the pension may be alleviating restrictions on indirect costs related to the search for health services and not necessarily those associated with direct spending on medical care (Martínez *et al.* 2015).

Organizational barriers are an important factor limiting access to services, which does not favor public insurance users.

¹⁷ The Basic Universal Pension is a non-contributory basic pension that offers US\$ 50 per month to people over age 70 in municipalities with a high incidence of poverty.

Table 5.7. Access to specialty care and coordination with primary care in El Salvador.

CHARACTERISTICS	PUBLIC (%)	SOCIAL SECURITY (%)	PRIVATE (%)	TOTAL (%)
Access to specialty care				
Consulted with a specialist in the last two years	16.9	24.1	21.8	20.7
Wait time for a consultation with the specialist				
< 2 weeks	33.6	25.8	28.7	28.6
Between 2 and 8 weeks	25.9	22.7	39.0	26.3
> 8 weeks	32.1	43.2	26.7	35.6
Coordination between PHC and specialty care				
It is necessary to ask for a referral for specialty care	69.4	77.0	64.4	72.0
The referral process was carried out by the doctor from the usual place of care	69.2	81.6 ^a	51.6	70.4
The referral process was performed by a doctor who is not from the regular place of care or the emergency room	9.7	6.0	17.6	8.8
The specialist had basic medical information from the regular PCP about the reason for the patient's consultation or test results.	60.3	60.7	54.8	60.0
After consultation with the specialist, the regular PCP was informed about the recommendations made by the specialist	46.1	57.7	46.1	52.3

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for private insurance ($p < 0.05$).

Table 5.8. Need for hospitalizations and use of emergency services in El Salvador.

CHARACTERISTICS	PUBLIC (%)	SOCIAL SECURITY (%)	PRIVATE (%)	TOTAL (%)
Hospitalization				
Required hospitalization in the last two years	5.2	5.7	4.7	5.2
After discharge, patient was readmitted or had to go to the emergency room	12.1	11.7	31.7	14.6
Hospital staff provided information about medication upon discharge	65.6	86.9	95.2	79.8
Hospital staff helped coordinate a follow-up consultation	57.1	84.3	84.1	72.5
The hospital staff provided written information about self-care	72.6	78.0	100.0	79.7
Emergency department				
Used the emergency room in the last two years	11.9	16.0	17.0	14.4
Considers that he used the emergency room for conditions that could have been treated at the primary level	41.6	44.7	38.2	41.4
After being evaluated by the emergency room, he was hospitalized or referred to another medical clinic	30.5	30.0	24.1	27.8
After being evaluated in the emergency department, the patient was discharged	65.9	66.9	73.0	68.8

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

There are no statistically significant differences between the three subgroups for the variables indicated in the table.

The percentage of people who went for a primary care consultation in the last year is 62% in public insurance and 74% in social security. The increasing accessibility gradient for services between the groups with public insurance, social security and private insurance is repeatedly seen in responses about the existence of a doctor or health service that they regularly visit, ease of communication with the primary care clinic during the day, and support in the coordination of care. In all three measures, the numbers reported among respondents with public insurance offer an unfavorable picture when compared to those with social security or private insurance. These levels of access represent an important bottleneck in the implementation of a primary health care-based system.

The perception of the quality of primary care has lower gradients among the three groups, but the pattern is repeated in most of the variables. There are better results among users of private insurance, followed by those who have social security and finally among those with public insurance, except in the response about the quality of primary care, which is slightly lower among those with social security. Nevertheless, the perception of lower quality among the latter is not supported by the responses about check-ups for NCDs; for almost all preventive measures, social security users indicate having more check-ups, receiving more advice on healthy lifestyles, and being up to date with blood pressure and serum cholesterol checks (men and women), plus mammograms and Pap smears (women). However, when preventive measures are evaluated together, compliance levels with check-ups are very low among all groups, whether looking at men or women. Alternatively, with respect to those who report having been diagnosed with at least

one chronic disease, the level of confidence in being able to manage their illnesses is relatively high (above 80%).

Renewed primary care models and integrated health service networks imply a leadership role in care, as well as good levels of coordination between primary and specialty care (Grundy *et al.* 2010). However, perceptions about coordination by primary care providers are low, especially in the public sector: only 31% of those in the public coverage group felt that the PCP coordinates care. The outlook seems to have been somewhat better for those in the social security group (44%) and those with private insurance (55%). This may suggest that primary care is not fulfilling its function as a gateway to the health system. Alternatively, the flow of information between primary and specialty care, associated with the referral and counter-referral processes, seems to function less efficiently in social security than in other groups. Wait times for specialty consultations are longer for social security beneficiaries than for those in the public system, which can be considered an achievement for the public sector given the difference in the allocation of per capita spending in both institutions. In addition, access to specialty care is considerably greater among those with private insurance.

The number of respondents who report having required hospitalization in the last two years is very low (less than 10% in all groups), so it is difficult to make inferences about results such as wait times and quality of hospitalization processes, although low numbers can represent difficulties in access to specialty care. The use of emergency services is a little higher, with almost 15% having gone in the last two years, but much lower than in countries such as Colombia,

where 47% of the population reports having used the emergency room. Almost half of public system users and social security beneficiaries report having gone to the emergency department for a condition that could have been treated at the primary level.

Conclusions

El Salvador has undertaken important reforms aimed at universalizing health coverage with financial protection, strengthening primary care and improving the quality of services, with the support of a broad alliance and strong leadership from the Ministry of Health (Clark 2015). The results of this survey indicate important progress. For example, the perception of quality among those who received care is relatively good, even in the public system and social security, which shows that the country is on the right path to strengthening primary care through Comprehensive Family Health Programs (MINSAL 2015). However, wait times for a consultation at the primary care level are still long, and reports of

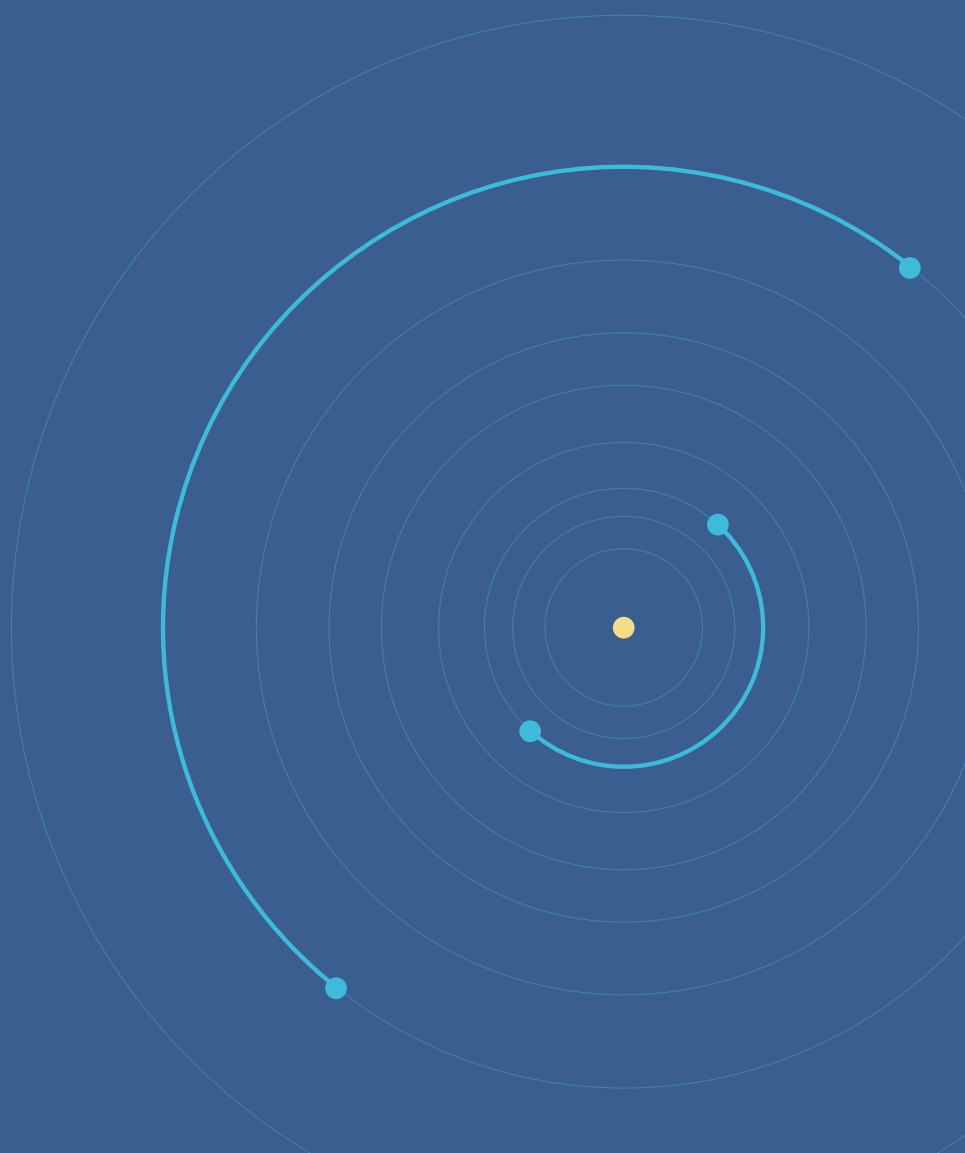
high out-of-pocket costs persist. There is also a perception that there is a gradient in quality, access and utilization of health services between the public sector, social security and those with private insurance. This is not surprising, considering that the public sector's per capita expenditure is the lowest in the system and less than half of the ISSS expenditure.

Since the survey presented in this study represents just one measurement at a point in time and efforts to strengthen health services in the country are still underway, it is important to continue monitoring the observed indicators so that new measurements can document their changes over time. The challenges to achieve primary care with good access and quality are common to almost all countries in the LAC region, and the case of El Salvador is no different. Hopefully, the results from the patient's point of view can guide policy and public management actions to ensure the continued strengthening of the PHC, as well as measures to improve access to and the quality of health services, key components of the health reforms that have been implemented in the country since 2009.

The Experience with Primary Health Care in Jamaica

6

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Epidemiological profile and characteristics of Jamaica's health system

In 2015, Jamaica recorded a per capita GDP of US\$ 13,268, which places the country above the regional average in terms of income level, while average annual growth was 0.7% in the last five years (WB 2017). For 2014, the total health expenditure in Jamaica was 5.4% of GDP, around US\$ 266 per person, and in the same year, government health expenditure was 2.8%, around US\$ 140 per person (WHO 2017). In terms of total health expenditure, 52.4% was public and 47.6% was private, with out-of-pocket spending corresponding to 27.8% of the total expenditure.

Like most countries in the LAC region, as well as those that are included in this study, Jamaica is in a process of demographic and epidemiological transition. In the last 14 years, life expectancy at birth increased 3.3 years, and according to 2014 indicators, Jamaican women and men can expect to live 78.1 and 73.3 years, respectively (WB 2017). In turn, the proportion of adults over 65 is growing at a rate higher than that of the total population. In Jamaica, this age group is expected to increase from 7.2% in 2000 to 18.1% in 2050, positioning Jamaica as a country with more than 700 million older adults.

According to 2015 data from the IHME, the burden of disease, measured in DALYs, attributed to NCDs is 74.54%, 16.3% for infectious and maternal and

child diseases, and 9.17% for injuries (IHME 2015). The burden due to NCDs and injuries is on the rise, displacing infectious and maternal and infant diseases as the top cause of ill health, though the double burden of disease—the coexistence of NCDs with infectious and maternal and infant diseases—is still evident. The following NCDs predominate: cardiovascular diseases (14.59% of total DALYs); diabetes, urogenital, hematological and endocrine diseases (12.72%); different types of cancer (12.10%); other non-communicable diseases (9.57%); and mental disorders and substance use (8.23%). Among the main risk factors for NCDs are high fasting plasma glucose (15.87%), high systolic blood pressure (13.13% of total attributable risk), high body mass index (12.75%), smoking (6.22%), and diet low in whole grains (6.06%).

The increase in the prevalence of chronic conditions presents a challenge for the functioning of health services. In order to deal with this new disease profile, an improvement in the resolution capacities of primary care services is required, together with the management of complex and integrated service networks (Demaio *et al.* 2017). However, to date there are few sources of information about the performance of health services in Jamaica, especially from the patient's perspective.

Jamaica recognizes the right to health of all citizens, but to guarantee it, the country faces the challenge of expanding access and reducing the financial burden, while increasing the quality of care.

Jamaica's health system is organized as a national public health system, with a supplemental private health system that covers around 20% of the population (Scott and Theodore 2013). The

Ministry of Health (MOH) is the system administrator, with primary responsibility for policy formulation, regulation and planning. Four decentralized regional health authorities are responsible for the delivery of health services. The National Health Fund (NHF) and the Jamaica Drugs for the Elderly Program (JADEP) provide funding for the purchase of drugs included on an official formulary. The NHF was established by the government in 2003 to improve access to essential medicines for the treatment of 16 chronic diseases in people of any age, while JADEP, initially a collaboration with the private sector, is a public program that provides subsidies for approved drugs to anyone age 60 or older, for the treatment of ten different chronic conditions. Jamaican citizens may enroll in one or both of the drug programs (Chao 2013).

An important milestone in the efforts to advance universal coverage in the country was the policy of eliminating user fees at national public health system facilities in 2008, due to its importance in reducing financial barriers to accessing health services (Beuermann and Pecha Garzón 2016). Since then, all citizens can use the public system for free at the health center. However, studies indicate that the public service network has a limited capacity to offer quality health services, and problem exacerbated by the increase in demand after the elimination of user fees (De La Haye and Alexis 2012). Enrollment in a private health plan is voluntary, and most of these insurance plans are linked to employment (Scott and Theodore 2013).

Historically, Jamaica has been a pioneer, both regionally and globally, in the development of a vision that prioritizes the strengthening of primary health care. In 1978, the country developed a PHC

platform that included the definition of catchment areas (population assigned to specific health centers), multidisciplinary teams, the participation of community health agents, and a strong emphasis on vaccination and prevention, among others. It was based on an innovative model for the time, which led to the participation of Jamaican experts on the committee that prepared the Alma-Ata Declaration in 1978 (Campbell 2013; McCaw-Binns and Moody 2001). However, in the following decades, the situation gradually changed and, although the country has undertaken important efforts to improve its health system, the level of conceptual or practical innovation necessary to face the epidemiological transition associated with the rapid increase in the prevalence of chronic diseases has not materialized.

At present, there are no sources of information on access, utilization and quality from the perspective of users in Jamaica. Therefore, the administration of an instrument based on the Commonwealth Survey (International Health Policy Survey) will allow us to examine the extent to which the country's public health system maintains the key components of a comprehensive health system focused on primary health care, such as coordination, continuity of care, and a patient-centered approach, which are fundamental to the goal of providing high quality universal health coverage. The results of the survey provide an initial overview of the perception and experience of patients using the public health system, including the self-report of financial and organizational barriers, five years after the elimination of out-of-pocket expenses at points of care. This analysis also compares the perceptions and experiences of private health insurance users with users of the

public health system, in order to identify possible disparities in the quality of public health care and private health services.

Below, we present the results obtained on the general perceptions of health system users in Jamaica, financial and physical access to health services, perceptions of the quality of primary care, and data about specialty care, in addition to results related to the use of emergency and hospital services. We discuss what these data mean in the context of Jamaica, and what can they tell us about the gaps that exist in the health system and the inequities between the main subsystems: (a) the public system, financed by general taxes, as previously mentioned; and (b) the private system, which provides coverage to those who obtain a supplemental private insurance plan. In the case of Jamaica, there is no coverage model comparable to the social security models financed by mandatory payroll contributions. To facilitate reading and comparability among the six countries included in the 2013 version of the survey in LAC, this chapter uses the term “public” in reference to all Jamaicans who do not have supplemental private insurance, given that public insurance coverage is universal; and “private,” in reference to those who have enrolled in an additional private plan.

Characteristics of the sample and general perceptions of the health system

The sample consists of a total of 1,488 individuals: 808 users of the public health system (who indicated that they do not have additional medical insurance)

and 680 participants with additional private coverage. Table 6.1 presents the general characteristics of the population under study.

The sample has a slightly higher proportion of women than men. 47.42% of the respondents are men, and no significant difference was found in the percentage of men for the different types of coverage (46.2% public system vs. 49.25% private insurance). The age distribution is also similar for those with public and private coverage, and we can see that, for both types of coverage, about 35% of users were over age 45. However, there is a significant difference between those who have public and private coverage in terms of education level: only 16.6% of people with private insurance reported having a primary school or lower education level, compared to 35.1% of public health system users.

More than half of the respondents stated that they had been diagnosed with at least one chronic disease, with the highest percentage among public system users (54.2%) compared to those with private insurance (47.6%). Despite the high proportion of participants with chronic conditions, only 19.94% of the population reported a low perception of their health status, a percentage that is considerably lower for those with private insurance (13.7%) compared to those in the public system (23.9%).

Table 6.2 presents the population's perceptions of the health system. The majority of the sample reported that the Jamaican health system requires significant improvements. Only 11.5% of the participants answered that the health system works quite well and only requires minor changes, while 52.4% thought that

some aspects are positive, but fundamental changes are needed to make it work better. 34.0% thought that there are so many problems with the health system that it is necessary to completely overhaul it.

Nearly 40% of respondents indicated that they were confident in receiving the most effective treatment, and this perception does not vary significantly between coverage groups.

Barriers to access services

Table 6.3 presents the respondents' answers about financial and transportation barriers in accessing health services. Financial barriers to accessing care are common in this sample and are particularly frequent among users of the public system, despite the no user fees policy. Less than one-third of the sample (28.6%) had a medical problem in the last year but did not go to the doctor due to the cost. This figure reached 34.4% among public system users and 21.6% of those with private insurance, with a statistically significant difference. The percentage of respondents who had medical problems in the last 12 months but did not go to a doctor or skipped an exam, treatment or follow-up visit due to the cost is 26.7% among the general population, although in that case the difference is not meaningful.

Out-of-pocket expenses were very frequent between both coverage types, with 93.7% of the sample reported having paid them in the last year. They were particularly frequent among those with private insurance (96.4%) compared to those in the public system (91.9%). 57.4% of the

Table 6.1. General characteristics of the sample by type of coverage in Jamaica.¹⁸

CHARACTERISTICS	PUBLIC	PRIVATE	TOTAL
Number of respondents (n)	808	680	1,488
Weighting (%)	60.7	39.2	100.0
Sex (%)			
Women	53.7	50.7	52.5
Age (%)			
18–25	21.8	22.9	22.2
26–35	23.9	21.8	23.1
36–45	18.2	20.9	19.3
46–59	19.5	18.3	19.0
60+	16.3	15.8	16.1
Education (%)			
Primary	35.1 ^a	16.6	27.8
Secondary	52.5	50.1	51.5
University	12.3 ^a	33.2	20.5
Health status (%)			
At least one chronic disease	54.2 ^a	47.6	51.6
Two or more chronic diseases	26.8	22.8	25.2
Low subjective perception of health status	23.9 ^a	13.7	19.9

Notes:

a. Value differs from the result for private insurance ($p < 0.05$).

¹⁸ All of the results presented in the tables, except for the number of respondents, use sample weights for national population representativeness.

Table 6.2. Perceptions and confidence in the health system in Jamaica.

CHARACTERISTICS	PUBLIC (%)	PRIVATE (%)	TOTAL (%)
Perceptions			
The system works quite well and only minor changes are needed to make it work better	11.0	12.3	11.5
Our health system has some positive aspects, but fundamental changes are needed to make it work better	50.7	52.5	51.4
There are so many problems in our health system that we must completely overhaul it	35.2	32.2	34.0
Confidence			
Confidence in receiving the most effective treatment, including medications and diagnostic tests	37.6	41.9	39.3

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status. There are no statistically significant differences between the three subgroups for the variables indicated in the table.

total respondents reported having incurred out-of-pocket expenses of more than US\$ 200, while 34.5% of respondents had expenses exceeding US\$ 500. After the elimination of four outliers with extremely high costs, the average out-of-pocket expenses appear to be similar for both groups. One-third of the sample had serious problems paying these expenses, a proportion that is significantly lower among those with private insurance (22.5%) as compared to public system users (36.2%).

The percentage of respondents who did not see a doctor due to difficulties with transportation was relatively low in the sample in general (8.1%), without significant differences between the public and private coverage groups.

Table 6.4 presents the respondents' answers about organizational barriers to accessing health services. Almost 80% reported having made at least one visit to the primary care center in the last year.

Of all respondents, 22.3% indicated that they had not gone for an exam, treatment or follow-up visit due to difficulties in scheduling an appointment. Almost three-quarters of respondents reported that they could schedule a primary care visit by phone, mail or web, but there is a significant difference between the public sector experience (69.5% said they can schedule appointments) and those who have private insurance (79.2% can schedule). Regarding the wait time to see a doctor or nurse the last time they

Table 6.3. Financial and transportation barriers in Jamaica.

CHARACTERISTICS	PUBLIC (%)	PRIVATE (%)	TOTAL (%)
Financial barriers			
Confidence in being able to pay for a treatment if necessary	34.2 ^a	45.5	38.4
Had medical problems but did not go to a doctor because of the cost	34.4 ^a	21.6	28.6
Did not go for an exam, treatment or follow-up visit due to cost	27.0	26.2	26.7
Out-of-pocket costs			
Had out-of-pocket costs	91.9 ^a	96.4	93.7
Had out-of-pocket expenses > US\$ 200	56.7	58.4	57.4
Had out-of-pocket expenses > US\$ 500	35.7	32.8	34.5
Had serious problems paying out-of-pocket expenses	36.2 ^a	22.5	29.9
Transportation barriers			
Did not see a doctor because of transportation difficulties	9.9	6.0	8.1

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for private insurance ($p < 0.05$).

needed care, 30.4% were seen the same day or the next, while 19.8% waited more than two weeks or never got care. Once again, this number was significantly higher for patients with private insurance (76.0%), compared to public system users (59.4%). While 12.9% waited more than two weeks or never managed to access care, the percentage was lower for those with private insurance (7.9%) compared to public system users (18.2%).

Experience with the use of PHC

Table 6.5 presents the results of users' experience with primary health care services. The population sample for the questions on experience with primary care is composed of those who report having a clinic or regular doctor, so that they can evaluate the entirety of care received rather than each individualized

Table 6.4. Organizational barriers and time to access primary care in Jamaica.

CHARACTERISTICS	PUBLIC (%)	PRIVATE (%)	TOTAL (%)
Organizational barriers			
Visited the primary care center at least once in the last year	76.5	83.5	79.3
Did not go for an exam, treatment or follow-up visit due to cost	25.3	18.5	22.3
Appointment can be scheduled with the PC clinic by phone, mail, or online	69.5 ^a	79.2	73.5
Difficulty in obtaining medical attention on evenings, weekends, or holidays prevents access to care without having to go to the emergency room	56.9	50.4	54.2
Time to access primary care provided by a doctor or nurse			
Same day or next	59.4 ^a	76.0	65.7
> 2 weeks or never	18.2 ^a	7.9	12.9

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for private insurance ($p < 0.05$).

interaction. The measures of experience with the use of primary care were divided into three dimensions: (1) the alignment with a patient-centered PHC model; (2) the perception of the quality of care; and (3) the focus on the provision of patient-centered services.

There is an important variation in the availability of patient-centered primary care according to coverage type. Of all respondents, just over 60% had a doctor and/or health service they attended regularly, with a figure significantly lower for the public system (55.3%) compared to those with private insurance (71.3%).

76.1% of the respondents reported that it was easy to communicate with their clinic during the day, with a significant difference between the two coverage groups (72.3% in the public system versus 81.6% with private insurance). Among those with a regular place of care, 59.2% of the total indicated that the physician is familiar with important information from their medical history, which also shows significant differences between groups (55.2% in the public group vs. 64.9% in the private group). A little less than one-third of respondents indicated that the PCP helps coordinate care, with no significant difference between the two groups. Considering the four previous

attributes, 14.1% of respondents use a service with the characteristics of a patient-centered PHC, with a disadvantage for the public sector that is statistically meaningful difference (10.7% vs. 21.5%).

When inquiring about the attributes of the patient's experience, among respondents with a PCP, 63.4% said they were allowed to ask questions about the recommended treatment, and 58.6% reported that the PCP spends sufficient time with the patient. It is observed that the prevalence of these attributes is lower in the public system (58.7% and 54.5%, respectively for the two variables) than among those with private insurance (70.2% and 64.6%, respectively). 67.8% of the respondents indicated that the PCP explains the situation in a way that is easy to understand, and 58.8% said that the doctor solves most of their health problems. Among patients who reported taking at least one prescription medication, less than one-third (31.8%) reported that their PCP reviewed the medications with them, including those prescribed by other physicians. Less than half of the sample (42.1%) stated that their PCP explained the potential side effects of medications. In this case, there is a significant difference between those with public and private coverage, since only 35.8% of public system users were informed about side effects, compared to 51.6% of those with private insurance.

In general, 51.3% of the sample perceived that the quality of primary care to be good, with a significant difference between those in the public system (46.0%) versus those with private insurance (59.3%). Regarding respondents who indicated that they had a medical problem that took them a long time to obtain an adequate diagnosis, the percentage among those with private

insurance was 20.4%, compared to 27.1% of public system users.

Table 6.6 presents the results of prevention, detection and management of chronic diseases. With regard to whether the PCP sent a reminder for a check-up, 21.5% of the total respondents answered affirmatively, with a significant difference between those with private insurance (28.2%) and those in the public system (17.4%). Nearly 23% of respondents indicated that the PCP discussed issues related to healthy lifestyles, such as diet, physical activity and stress factors. Furthermore, of the total respondents, 64.5% indicated that they had a check-up in the last two years.

All respondents were asked about the blood pressure and serum cholesterol checks. While all women were asked about cervical cancer screening (Pap tests), the sample for mammograms was restricted to women over 40 at the time of the interview. In this sample, a higher percentage of women had their blood pressure checked in the last year (88.3%) than did men (75.1%). The percentage of people with a recent blood pressure screening does not differ significantly by coverage type for both sexes. The percentage of men and women who had a serum cholesterol test was 56.8% and 60.7%, respectively, without significant differences between coverage groups.

The percentage of women surveyed who reported having been screened for cervical cancer in the last three years was 53.0%, a proportion that did not differ significantly between the groups. Only 32.9% of the women over 40 indicated that they had had a mammogram in the last three years, also without significant differences between coverage types.

Table 6.5. Experience with primary care in Jamaica.

CHARACTERISTICS	PUBLIC (%)	PRIVATE (%)	TOTAL (%)
Patient-centered PHC			
Has a doctor and/or health service that patient regularly visits	55.3	71.3	61.2
Communication with the PC clinic during the day is easy	72.3 ^a	81.6	76.1
The primary care physician (PCP) is familiar with important information about the patient's medical history	55.2 ^a	64.9	59.2
PCP helps coordinate care	28.8	36.1	31.7
Has patient-centered PHC	10.7 ^a	21.5	14.1
Patient experience			
The PCP allows the patient to ask questions about he recommended treatment	58.7 ^a	70.2	63.4
The PCP spends enough time with the patient	54.5 ^a	64.6	58.6
The PCP explains the situation in an easy-to-understand way	64.8	72.2	67.8
The PCP finds a solution to most of the patient's health problems	55.0	64.3	58.8
The PCP reviewed the patient's medications	29.6	34.9	31.8
The PCP explained the potential side effects of medications	35.8 ^a	51.6	42.1
Perception of quality			
Perception of very good quality with regard to primary-level care	46.0 ^a	59.3	51.3
Had a medical issue and it took a long time to receive an adequate diagnosis	27.1	20.4	24.2

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for private insurance ($p < 0.05$).

Table 6.6. Prevention, detection and management of chronic diseases in Jamaica.

CHARACTERISTICS	PUBLIC (%)	PRIVATE (%)	TOTAL (%)
Prevention			
The PCP sent a reminder for a check-up	17.4 ^a	28.2	21.5
The PCP discussed healthy lifestyles (diet, physical activity, stress factors)	21.0	24.9	22.5
Had a preventive care visit (check-up) in the last two years	59.9	72.0	64.5
Timely screening tests in women			
Women who had their blood pressure checked in the last year	87.4	89.6	88.3
Women who had their serum cholesterol checked in the last year	54.5	60.5	56.8
Basic screening tests for women (blood pressure and cholesterol check)	49.5	55.7	51.8
Women who underwent Pap smear in the last three years	54.2	51.1	53.0
Women over age 40 who had a mammogram in the last three years	28.1	42.1	32.9
Early detection tests for women over age 40 (blood pressure, cholesterol check, Pap smear and mammogram)	19.1	22.0	20.1
Timely screening tests in men			
Men who had their blood pressure checked in the last year	70.9	81.5	75.1
Men who had their serum cholesterol checked in the last year	56.5	67.0	60.7
Basic early screening tests for men (blood pressure and cholesterol check)	48.5	61.2	53.5
Management of chronic diseases			
Has a chronic illness, has confidence that he can manage his health problems	78.4	87.5	81.7

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status. Prevalence of the variables for prevention and management of chronic diseases also sex-adjusted.

a. Value differs from the result for private insurance ($p < 0.05$).

Access and coordination of specialty care, hospitals and emergency services with primary care

Table 6.7 presents the results related to the use of specialty care, and the experience of users with referrals and counter-referrals between primary and specialty care. Even with a PHC with a high capacity to resolve most of the population's health problems, it is impossible to dispense with a support network of specialty care to solve more complex problems, ideally in a coordinated way, with defined protocols and an exchange of information. 26.2% of the sample saw a specialist in the last year, without significant differences between coverage types. The referral process is similar for both types of coverage: 54.7% were referred by their doctor at their regular place of care.

The wait time to see a specialist indicated by more than half of the respondents (54.8%) was less than two weeks. A little less than two-thirds of the sample (63.0%) indicated that the specialist had basic medical information from the regular PCP about the reason for the patient's visit or exam results. After consulting the specialist, 58.5% of the sample reported that their regular PCP had been informed. Prevalence rates do not differ significantly by type of coverage.

Table 6.8 presents the results related to the utilization of hospitalization and emergency services. 13.2% of the sample reported having been hospitalized in the last two years. Among those who required hospitalization, 19.1% reported that they

were readmitted to the hospital after discharge or had to go to the emergency room. The vast majority of respondents who were hospitalized (72.5%) reported that hospital staff provided information on the medication received upon discharge; however, this percentage was significantly lower for public system users (65.1%) than for those with private insurance (85.4%). About two-thirds of respondents (62.5%) reported that hospital staff helped them coordinate a follow-up consultation with their health provider, in this case without significant difference by coverage type. A lower percentage (50.2%) stated that hospital staff gave them written information about self-care, a similar figure for both coverage types.

24.2% of those surveyed indicated that they had used the emergency room in the last two years. Over half the sample (59.0%) indicated that they had used it for conditions that could have been treated at the primary level, and this figure was similar for both coverage types. The majority of patients (74.2%) were discharged after their visit to the emergency room.

Discussion

In recent years, some important results of the no user fees policy, established in 2008, have been noted in the literature. For example, among the users of services provided by the Ministry of Health, when comparing the years 2006 and 2009, there were increases of 12.1% in hospitalizations, 28.3% in outpatient consultations at hospitals, 71.1% in emergency admissions, 15.9% in surgeries, 77.6% in the use of pharmacies, and 27.5% in consultations at health centers (Campbell 2013). In addition, an impact evaluation shows that

Table 6.7. Access to specialty care and coordination with primary care in Jamaica.

CHARACTERISTICS	PUBLIC (%)	PRIVATE (%)	TOTAL (%)
Access to specialty care			
Consulted with a specialist in the last two years	24.8	28.4	26.2
Wait time for a consultation with the specialist			
< 2 weeks	45.1 ^a	70.9	54.8
Between 2 and 8 weeks	32.8	20.4	26.7
> 8 weeks	17.5 ^a	5.1	10.3
Coordination between PHC and specialty care			
It is necessary to ask for a referral for specialty care	76.7	79.2	77.7
The referral process was carried out by the doctor from the regular place of care	52.8	57.1	54.7
The referral process was performed by a doctor who is not from the regular place of care or the emergency room	16.1	14.8	15.5
The specialist had basic medical information from the regular PCP about the reason for the patient's consultation or test results.	64.9	60.6	63.0
After consultation with the specialist, the regular PCP was informed about the recommendations made by the specialist	54.2	64.6	58.5

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for private insurance ($p < 0.05$).

the no user fees policy reduced both the probability of suffering from an illness associated with lost workdays and the number of workdays lost by 28.6% and 34.0%, respectively (Beuermann and Pecha Garzón 2016). The results of this survey also confirm significant public demand for health services, as 79.3% of

the sample reported having gone to a health clinic, whether public or private. Nevertheless, despite these important advances, the results of the survey suggest that financial and organizational access barriers persist from the perspective of health service users.

Table 6.8. Need for hospitalizations and use of emergency services in Jamaica.

CHARACTERISTICS	PUBLIC (%)	PRIVATE (%)	TOTAL (%)
Hospitalization			
Required hospitalization in the last two years	12.8	13.7	13.2
After discharge, patient was readmitted or had to go to the emergency room	21.3	16.1	19.1
Hospital staff provided information about medication upon discharge	65.1 ^a	85.4	72.5
Hospital staff helped coordinate a follow-up consultation	58.5	69.5	62.5
The hospital staff provided written information about self-care	49.4	51.5	50.2
Emergency department			
Used the emergency room in the last two years	25.4	22.6	24.2
Considers that he used the emergency room for conditions that could have been treated at the primary level	58.5	60.1	59.0
After being evaluated by the emergency room, he was hospitalized or referred to another medical clinic	18.7	30.2	22.1
After being evaluated in the emergency department, the patient was discharged	78.0	67.5	74.2

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for private insurance ($p < 0.05$).

From a financial point of view, it seems that the public health system has yet to have reached its goal of providing protection against out-of-pocket expenses. At the time of the survey, 36.2% of public system users reported having serious problems paying their medical bills. Although one would expect those with private insurance to pay more for their

care, table 6.3 shows that both groups face high out-of-pocket expenses and that the average annual expenditure is in fact quite similar for both. Therefore, the economic barrier seems to be universal in that it affects all users—regardless of coverage type—although the impact on those in the public system is greater, given that those with private insurance probably

have a higher socioeconomic status and, therefore, are better prepared to cover the expenses incurred.

From an organizational standpoint, wait times to access primary and specialty care are longer for patients in the public system. The coordination of care is also very low for both groups and is particularly problematic for public health system users. Overall, 22.3% of respondents said they did not need a referral for specialty care, a finding that may be a symptom of lack of integration in the Jamaican health system, with primary care services that fail to serve as gatekeepers of specialty care. The lack of integration between different entities in the public health system is further evidenced by the fact that only 29% of users in the public system reported that their PCP coordinates care with other doctors. In addition, almost half of public system users who consulted a specialist in the last year indicated that their PCP was not informed after the consultation. Although they remain low, the results regarding coordination are significantly more positive for those with private insurance. The degree of utilization of emergency services for conditions that could have been treated at the primary level is striking. However, proportionally, these prevalence rates are similar in both public and private services (58.5% and 60.1%, respectively), which indicates quality and coordination gaps in both types of coverage.

Both quality and access to care are significantly lower for public health system users than for those with additional private coverage. Despite the high prevalence of self-reported chronic disease the population still reports good health status, and this may

be due to a lack of education about NCDs and weakness in the preventive approach, which is also reflected in the low figures on access to and visits for check-ups.

Conclusions

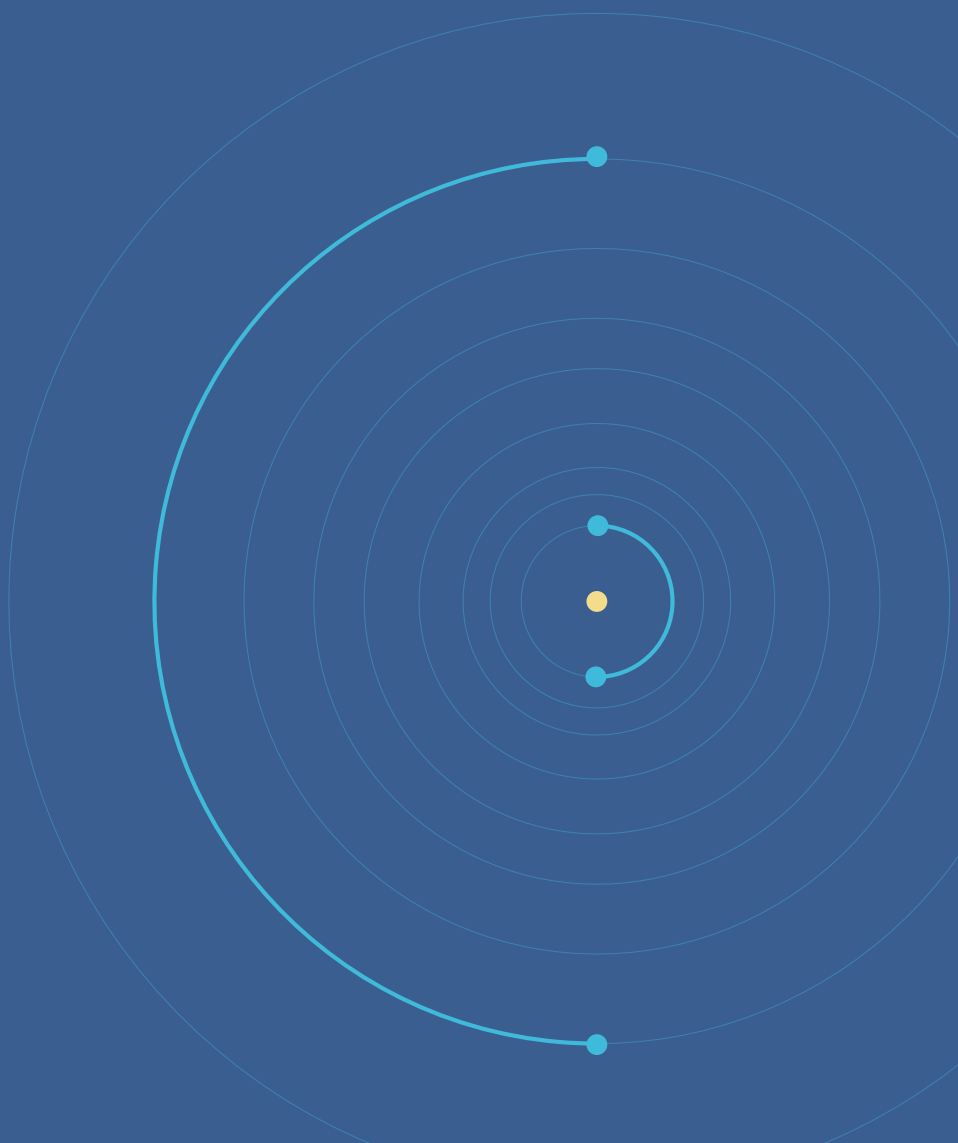
The results of this survey confirm some important progress in the expansion of access to health services, especially in the utilization rates reported by users. Despite progress, there is also evidence that the no user fees policy, established in 2008, has not yet been sufficient to guarantee full financial protection for public health system users. Access to primary and secondary care and screening tests continue to be lower for users of the national public health system than for those who have private insurance. The interpersonal quality of care and general satisfaction with the health system are also significantly lower for public health system users.

These results support the assertion that efforts to ensure universal coverage must keep continuously improving in order to achieve real accessibility at the desired levels and with sufficient levels of care quality. Given the current epidemiological profile—and considering Jamaica's history of world leadership and vision with regard to PHC—the strengthening of primary care and an emphasis on prevention, together with a strengthening of management, would help to continue improving indicators of access and quality, while controlling the financial and social impact of NCDs in the coming years.

The Experience with Primary Health Care in Mexico

7

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Epidemiological profile and characteristics of Mexico's health system

In 2015, Mexico recorded a per capita GDP of US\$ 9,005, which places the country above the regional average in terms of income level, and for the 2011 to 2015 period, its average annual growth was 2.8% (WB 2017). The levels of poverty and inequality have been steadily declining in the last few years, and in 2014, around 3% of the population had a daily income of less than US\$ 3.10, adjusted for purchasing power parity. For 2014, the total health expenditure was 6.3% of GDP, about US\$ 677 per person, and for that same year, government health expenditure was 3.3%, about US\$ 350 per person (WHO 2017). In terms of total health expenditure, 52% was public and 48% was private, with out-of-pocket spending corresponding to 44% of the total expenditure.

Like most countries in the LAC region, Mexico is in a process of demographic and epidemiological transition. In the last 14 years, life expectancy at birth increased 2.4 years, and according to 2014 indicators, Mexican women and men can expect to live 79.2 and 74.4 years, respectively. In turn, the proportion of adults over 65 is growing at a rate higher than that of the total population. Trends indicate that the proportion of this age group will increase from 4.7% in the year 2000 to 18.6% in 2050, positioning Mexico as a country with more than 27 million older adults.

According to 2015 data from the IHME, the burden of disease, measured in DALYs, attributed to NCDs is 75.3%, 12.0% for injuries, and 12.6% for infectious and maternal and child diseases (IHME 2015). The burden of NCDs is on the rise, displacing injuries and infectious and maternal and infant diseases. The following NCDs predominate: cardiovascular diseases (9.78% of total DALYs); mental disorders and substance abuse (9.03%); different types of cancer (8.15%); other non-communicable diseases (11.97%); and diabetes, urogenital, hematological and endocrine diseases (14.99%). Among the main risk factors for NCDs are high systolic blood pressure (9.95% of total risk attributable), high body mass index (14.43%), high fasting plasma glucose (18.63%), compromised kidney function (8.02%), and alcohol use (4.2%).

The increase in the prevalence of chronic conditions presents a challenge for the functioning of health services. In order to deal with this new disease profile, an improvement in the resolution capacities of primary care services is required, together with the management of complex and integrated service networks (PAHO 2011). However, to date there are few sources of information about the performance of health services in Mexico, especially from the patient's perspective (Reyes-Morales 2013; Saucedo-Valenzuela 2010).

The Mexican health sector is complex and segmented, with overlapping coverage. Currently, access to services is divided among four large population groups: (1) workers and their families, covered by contributory social health insurance (social security) (about 75.1 million people or 62.8% of the population) (INEGI, 2014); (2) people who are not enrolled in social security, the majority of whom use the

public non-contributory insurance plan *Seguro Popular* (about 54.9 million people or 46% of the population); (3) people who can access private insurance or private medical assistance, regardless of coverage through public insurance (approximately 10 million people or 8.8% of the population), and (4) a possible fourth group made up of people who do not have any type of insurance (some 15.6 or 18.7 million) (González-Block, 2015). Nevertheless, the discussion about the scope of universal coverage in Mexico persists, with some suggesting that the country practically has universal coverage (Knaul *et al.* 2012), while others defend the point of view that this goal has still not been reached (Gutiérrez 2013). However, it is worth clarifying that people without access to public health insurance can use—at no cost—the services provided by the Ministry of Health (SdS), and that a large portion of these people live in remote rural areas.

The public health sector includes the Ministry of Health and Social Security institutions. The SdS is the main health authority in charge of the governance, administration, design, planning and implementation of health policies and national programs (i.e., public health programs). It is also responsible for collecting and compiling information related to the health of the country (such as epidemiological statistics, mortality, hospital discharges) and carrying out assessment activities in the health sector. In addition, through the state Secretaries of Health, services are provided to those enrolled in *Seguro Popular*, informal workers, and low socioeconomic status individuals. The state secretaries of health are decentralized entities found in each of the country's 32 states, so there is a great deal of variability in terms of management organizations, infrastructure,

health service delivery, and quality of care (Ministry of Health 2013). The SdS offers highly specialized medical care through the National Institutes of Health and the network of federal hospitals. In addition, to supplement access for the vulnerable population living in remote rural areas (22 million) in 19 states, the IMSS-*Prospera* program provides free primary and secondary care. It is estimated that approximately half of this population is enrolled in *Seguro Popular*.

Social security institutions function at the national level and provide social, economic and health benefits to specific segments of the population. These include the Mexican Social Security Institute (IMSS), the Government Workers' Social Security and Services Institute (ISSSTE), *Petróleos Mexicanos* (PEMEX), the Ministry of Defense (SEDENA), the Ministry of the Navy (SEMAR) and others. The right to receive health care through social security is linked to one's employment status. Financing is contributory and tripartite and is sourced from employee and employer contributions and the government. Social security institutions do not have an explicit benefits package.

The private sector is continuously expanding, but it is not fully regulated or linked to national health policies. The private health insurance market covers approximately 8.8% of the population (INEGI 2014). Within ambulatory care services, there are approximately 14,000 private physicians adjacent to private pharmacies, a figure that ballooned in less than a decade. These doctors absorb the unmet demand of those enrolled with public health institutions—since up to 70% of their users have public health insurance (Pérez-Cuevas *et al.* 2014)—although there are serious concerns

regarding hiring conditions, quality of care, excessive prescriptions and conflicts of interest (Funsalud 2014).

In the last decade, Mexico has undertaken three strategic health policies for the population without social security: achieve universal health coverage, facilitate access, and provide financial protection against health-related expenses (Knaul and Frenk 2005). In the pursuit of these policies, health financing has increased rapidly. From 2000 to 2014, total public spending on health increased by 81.7% in real terms. In 2015, the budget allotted to the SdS was MX\$ 212.77 billion, which represents 1.16% of Mexico's GDP. Social security institutions received the equivalent of 1.74% of GDP. Total health expenditure represents 6.2% (public, 2.9%, and private, 3.3%) of GDP (OECD 2016), but a significant proportion of private health spending is still out-of-pocket (OECD 2016).

Mexico's reforms aimed at closing gaps in access to health care and reducing related out-of-pocket expenses have produced positive results. In 2003, the government launched *Seguro Popular*, which in 2014 reported 57 million enrollees (National Commission for Social Protection in Health 2014). It is worth mentioning that the total number of enrollees in public health institutions is greater than the total Mexican population. This inconsistency is due to the phenomenon of overlapping enrollment, as some people are enrolled in one, two or three health systems. However, the Ministry of Health recognizes that there are still people without public insurance coverage and, therefore, efforts to continue expanding coverage must remain in place. Multiple assessments of *Seguro Popular* have shown the program's progress in terms of increasing coverage and access to care;

however, the goal of providing financial protection has only been partially met. A 3% reduction in catastrophic health care expenses has been documented (CONEVAL 2016), yet it was reported that the proportion of out-of-pocket health spending was 44% in 2014 (CONEVAL 2015).

In spite of multiple efforts to achieve universal coverage, and the fact that the health care services provided by Social Security and the Ministry of Health are organized by levels of care, the country lacks a national primary care strategy that serves as a basis for the design and operation of health care networks. Some initiatives had significant localized success, such as the PREVENIMSS program, which began in 2002 and focused on strengthening preventive care programs (Gutiérrez *et al.* 2010); however, the urgency of a renewal and strengthening of primary and preventive care functions in the country is still recognized (OECD 2016). In that context, the results of the administration of a variation of the Commonwealth Survey in the country offer an important look to characterize the country's health system from the perspective of a network model based on primary care.

Below, we present the results obtained on the general perceptions of health system users in Mexico, financial and physical access to health services, perceptions of the quality of primary care, and data about specialty care, in addition to results related to the use of emergency and hospital services. We discuss what these data mean in the context of Mexico, and what can they tell us about the gaps that exist in the health system and the inequities between the main subsystems: (a) the contributory scheme, financed predominantly by payroll taxes on formal workers and employer contributions; (b) the subsidized

scheme, which is financed by general taxes and includes the poorest people, informal workers, and those who do not have social security or private medical insurance; and (c) those who decide to acquire supplemental private insurance, regardless of their enrollment in one of the two government subsystems. To facilitate reading and comparability among the six countries included in the 2013 version of the survey in LAC, this chapter uses the term “social security” for those enrolled in the contributory scheme but who do not have any private insurance, “public” to refer to those enrolled in the subsidized regime but who do not have social security or private insurance, and “private” to refer to those who have enrolled in an additional private plan. These categories are mutually exclusive.

Characteristics of the sample and general perceptions of the health system

The sample consisted of a total of 1,488 individuals: 251 public health system users, 780 social security beneficiaries, 291 individuals with private insurance, and 166 uninsured individuals. It should be noted that 107 respondents indicated that they were enrolled in both the public system and social security, 111 reported that they had private insurance in addition to public coverage, and 43 of the respondents indicated that they were enrolled in social security and a private health plan. Table 7.1 presents the general characteristics of the population under study. The sample contains a slightly higher proportion of women than men, mainly in the group without health insurance, although no

Table 7.1. General characteristics of the sample by type of coverage in Mexico.¹⁹

CHARACTERISTICS	UNINSURED	PUBLIC	SOCIAL SECURITY	PRIVATE	TOTAL
Number of respondents (n)	166	251	780	291	1,488
Weighting (%)	11.8	22.3	47.7	18.2	100.0
Sex (%)					
Women	55.1 ^b	54.6	49.1	49.6	51.2
Age (%)					
18–25	31.7	27.8 ^b	20.6	23.5	24.1
26–35	30.0	22.6	24.6	24.9	24.8
36–45	21.9	27.8	19.8	20.8	22.0
46–59	15.5 ^{b, c}	17.7 ^b	24.8	24.7	22.1
60+	0.9 ^{a, c}	4.1 ^{b, c}	10.2	6.2	7.0
Education (%)					
Primary	30.9 ^a	50.5 ^{b, c}	19.5	16.1	27.1
Secondary	61.7 ^{b, c}	40.9 ^{b, c}	59.4	58.7	55.4
University	7.5 ^{a, c}	8.6 ^{b, c}	21.0	25.3	17.5
Health status (%)					
At least one chronic disease	16.4 ^b	34.7	40.3	32.5	34.8
Two or more chronic diseases	4.7 ^a	12.2 ^c	18.8	12.3	14.5
Low subjective perception of health status	13.1 ^a	27.6	23.1	16.9	21.8

Notes:a. Value differs from the result for the public system ($p < 0.05$).b. Value differs from the result for social security ($p < 0.05$).c. Value differs from the result for private insurance ($p < 0.05$).

19 All of the results presented in the tables, except for the number of respondents, use sample weights for national population representativeness.

statistically significant differences were found between the groups, except for those enrolled in social security compared to those who do not have any insurance.

About one-third of the sample (27.1%) reported having a primary education level or less. The percentage was significantly higher among public system users (50.5%), as compared to the other groups, whose percentage was much lower.

One-third of the respondents said they had been diagnosed with at least one chronic disease, the highest percentage being among those with social security (40.3%), followed by those enrolled in the public system (34.7%), private insurance (32.5%) and uninsured (16.4%). Meanwhile, only 21.8% of the population indicated a low perception of their health status, without a significant difference by coverage type.

Table 7.2 presents the population's perceptions of the health system. The majority of participants indicated that the Mexican health system requires significant improvements. Only 16.5% of all respondents reported that the health system works quite well and would only require minor changes to function better, while 54.4% answered that there are some positive aspects, but it is necessary to make fundamental changes. More critically, 25.9% felt that there are so many problems in the health system that it is necessary to completely overhaul it. These opinions were not significantly different between exclusive users of the public system and those with private insurance. With regard to confidence in receiving the most effective treatment, 73.4% of respondents indicated that they were confident, with a significant difference between public insurance users (63.7%) as compared to social security beneficiaries (78.7%).

Barriers to access services

Table 7.3 presents respondents' answers about financial and transportation barriers in accessing health services. Financial barriers are the most significant, and current Mexican health policies do attempt to address them; however, it is clear that there is a great deal of room for improvement. In that sense, it is worth highlighting that 66.7% were confident in their ability to pay for a treatment, while 33.3% were not. Furthermore, 17.4% had a medical problem in the last year but did not go to the doctor due to the cost. This percentage was significantly higher for public system users (27.7%), while it was lower for those with private insurance (10.9%) and those enrolled in social security (15.6%). 16.7% of the total number of respondents reported having had medical problems in the last 12 months, but they skipped an exam, treatment or follow-up visit due to the cost.

In the Mexican health sector, some people do not seek medical attention due to out-of-pocket costs. The majority of the sample reports having had out-of-pocket expenses (78.4%), and 88.5% of the uninsured state that they have paid for care with their own funds. 38.7% of the total stated that they had out-of-pocket expenses of more than US\$ 200, while 15.1% indicated that they were greater than US\$ 500. The highest prevalence of out-of-pocket expenses over US\$ 500 was observed in those who had private health insurance (33.1%). 17.5% of the sample had serious problems paying these costs.

Transportation barriers are a significant, unresolved problem that needs to be addressed in the Mexican health

Table 7.2. Perceptions and confidence in the health system in Mexico.

CHARACTERISTICS	UNINSURED (%)	PUBLIC (%)	SOCIAL SECURITY (%)	PRIVATE (%)	TOTAL (%)
Perceptions					
The system works quite well and only minor changes are needed to make it work better	12.5	22.3	15.2	16.5	16.5
Our health system has some positive aspects, but fundamental changes are needed to make it work better	47.1	48.7	59.2	55.2	54.4
There are so many problems in our health system that we must completely overhaul it	38.4	26.7	23.4	25.9	25.9
Confidence					
Confidence in receiving the most effective treatment, including medications and diagnostic tests	74.4	63.7 ^a	78.7	71.7	73.4

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for social security ($p < 0.05$).

sector. The percentage of respondents who did not see a doctor due to difficulties with transportation was 8.6%, although it was considerably lower for those with private insurance (4.1%), as compared to those in the public system (10.3%) and social security (10.7%).

Table 7.4 presents the respondents' answers about organizational barriers to accessing health services. It is noteworthy that more than 80% visited a primary care center at least once in the last year; however, 14% missed a doctor's visit for treatment or follow-up due to difficulties in scheduling an appointment. Communication was also

problematic, as only about 57% could communicate remotely (telephone, mail). In addition, a high percentage (64.8%) of participants perceived that services are difficult to access on evenings or weekends. Regarding the wait time to see a doctor or nurse the last time they needed care, the majority of respondents (64.1%) were seen the same day or the next. This number was higher for patients with private insurance (77.2%) and the uninsured (75.7%), as compared to public system users (55.6%) and social security beneficiaries (60.3%). Alternatively, only 9.8% of respondents indicated that they waited more than two weeks or that they never managed to access care.

Table 7.3. Financial and transportation barriers in Mexico.

CHARACTERISTICS	UNINSURED (%)	PUBLIC (%)	SOCIAL SECURITY (%)	PRIVATE (%)	TOTAL (%)
Financial barriers					
Confidence in being able to pay for a treatment if necessary	69.4	61.9	67.5	69.7	66.7
Had medical problems but did not go to a doctor because of the cost	27.4	27.7 ^{a, b}	15.6	10.9	17.4
Did not go for an exam, treatment or follow-up visit due to cost	24.4	22.1	14.7	14.0	16.7
Out-of-pocket costs					
Had out-of-pocket costs	88.5 ^b	82.3	71.7 ^b	87.5	78.4
Had out-of-pocket expenses > US\$ 200	41.1	44.8	31.7 ^b	53.2	38.7
Had out-of-pocket expenses > US\$ 500	15.4 ^b	14.0 ^b	11.1 ^b	33.1	15.1
Had serious problems paying out-of-pocket expenses	22.7	23.8	15.2	15.0	17.5
Geographic barriers					
Did not see a doctor because of transportation difficulties	7.9	10.3	10.7 ^b	4.1	8.6

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for social security ($p < 0.05$).

b. Value differs from the result for private insurance ($p < 0.05$).

Table 7.4. Organizational barriers and time to access primary care in Mexico.

CHARACTERISTICS	OTHER INSURANCE	PUBLIC (%)	SOCIAL SECURITY (%)	PRIVATE (%)	TOTAL (%)
Organizational barriers					
Visited the primary care center at least once in the last year	73.6	78.7	84.1	78.4	80.6
Did not go for an exam, treatment or follow-up visit due to cost	12.2	15.4	16.0	8.3	13.5
Appointment can be scheduled with the PC clinic by phone, mail, or online	42.5 ^c	46.6 ^c	58.4 ^c	68.7	56.8
Difficulty in obtaining medical attention on evenings, weekends, or holidays prevents access to care without having to go to the emergency room	65.2	69.5	66.2	57.2	64.8
Time to access primary care provided by a doctor or nurse					
Same day or next	75.7 ^{a, b}	55.6 ^c	60.3 ^c	77.2	64.1
> 2 weeks or never	7.2	14.2	10.1	7.4	9.8

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for the public system ($p < 0.05$).

b. Value differs from the result for social security ($p < 0.05$).

c. Value differs from the result for private insurance ($p < 0.05$).

Experience with the use of PHC

Table 7.5 below presents the results of users' experience with primary health care services. The population sample for the questions on experience with primary care is composed of those who report having a clinic or regular doctor, so that they can evaluate the entirety of care received rather than each individualized interaction. The measures of experience with the use of primary care were divided into three dimensions: (1) the alignment with a patient-centered PHC model; (2) the perception of the quality of care; and (3) the focus on the provision of patient-centered services.

With regard to the attributes of patient-centered PHC, the percentage of respondents who indicated having a doctor and/or a health service that they visit regularly was 61.8%, with wide variation among coverage groups. Among the uninsured, 26.7% say they have a regular place of care, compared with 58.4% of public insurance enrollees, 72.7% of those with social security and 71.2% of those with private insurance. Among respondents who had some kind of communication with their primary care clinic, 48.6% reported that it was easy, with a disadvantage for those with public insurance (42.3%) and social security (44.1%) versus the uninsured (64.3%) or those with private insurance (63.1%). 75.2% of respondents with a PCP stated that the doctor was familiar with important information from their medical history. The results were lower for the uninsured and public insurance beneficiaries (64.6% and 62.6%, respectively), as compared to social security beneficiaries or those with private insurance (78.0% and 83.3%,

respectively). 48.3% of respondents stated that the PCP helps coordinate care, with no significant difference by coverage type. Taking the four attributes as a whole, 12.8% of respondents indicated that they had health services with the characteristics of patient-centered PHC, with some non-statistically significant variation among the different coverage categories: 8.2% of the uninsured, 12.8% of public system users, 12.2% of social security beneficiaries, and 16.7% of those with private insurance.

Regarding the dimension of the patient's experience with his PCP, 79.9% of respondents said that the PCP allows them to ask questions about the recommended treatment, 73.1% stated that the PCP spends enough time with the patient, and 78.0% indicated that the doctor explains the situation in a way that is easy to understand. In addition, 80.5% felt that the PCP solves the majority of their health problems, a proportion that was significantly higher for those with private insurance (90.1%) than the uninsured (80.7%), public system enrollees (72.4%), and social security beneficiaries (79.8%). 62.1% of patients who indicated that they take at least one prescription medication reported that their PCP reviewed their medications, including those prescribed by other physicians. Similarly, 61.8% of respondents indicated that their PCP explained the potential side effects of their medications.

Overall, 35.4% of respondents perceived that the quality of primary care is good. In addition, 15.8% of respondents reported having had a medical problem for which it took a long time to get the proper diagnosis, without significant difference by coverage type.

Table 7.6 presents the results of prevention, detection and management of chronic

Table 7.5. Experience with primary care in Mexico.

CHARACTERISTICS	UNINSURED (%)	PUBLIC (%)	SOCIAL SECURITY (%)	PRIVATE (%)	TOTAL (%)
Patient-centered PHC					
Has a doctor and/or health service that patient regularly visits	26.7 ^{a, b, c}	58.4 ^b	72.7 ^c	71.2	61.8
Communication with the PC clinic during the day is easy	64.3	42.3 ^c	44.1 ^c	63.1	48.6
The primary care physician (PCP) is familiar with important information from the patient's medical history	64.6	62.6 ^{b, c}	78.0	83.3	75.2
PCP helps coordinate care	63.5	38.5	50.7	47.8	48.3
Has patient-centered PHC	8.2 ^c	12.8	12.2	16.7	12.8
Patient experience					
The PCP allows the patient to ask questions about the recommended treatment	82.2	68.4 ^c	80.2 ^c	90.2	79.9
The PCP spends enough time with the patient	71.8	65.3	74.3	77.5	73.1
The PCP explains the situation in an easy-to-understand way	83.5	67.6 ^c	79.0	84.5	78.0
The PCP finds a solution to most of the patient's health problems	80.1	72.4 ^c	79.8 ^c	90.1	80.5
The PCP reviewed the patient's medications	81.3	67.1	58.3	69.8	62.1
The PCP explained the potential side effects of medications	76.7	76.0	55.2	72.8	61.8

Table 7.5. Continues from previous page.

CHARACTERISTICS	UNINSURED (%)	PUBLIC (%)	SOCIAL SECURITY (%)	PRIVATE (%)	TOTAL (%)
Perception of quality					
Perception of very good quality with regard to primary-level care	42.8	31.9	31.5 ^c	48.0	35.4
Had a medical issue and it took a long time to receive an adequate diagnosis	15.2	18.2	16.0	12.6	15.8

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for the public system ($p < 0.05$).

b. Value differs from the result for social security ($p < 0.05$).

c. Value differs from the result for private insurance ($p < 0.05$).

diseases. 23.8% of total respondents indicated that the PCP sent a reminder for a check-up, and the percentages were very similar among all coverage groups.

Advice on healthy lifestyle is an important issue in the Mexican context, since there is a high prevalence of overweight, obesity and chronic diseases, such as diabetes and hypertension, in all age groups. The findings indicate that orientation to a healthy lifestyle is an unmet need in the delivery of primary health care services. 40.9% of respondents indicated that the PCP discussed issues related to healthy lifestyles, such as diet, physical activity and stress factors. The figures ranged from 29.9% in the uninsured to 45.2% in social security beneficiaries. In addition, 60.5% of all respondents reported having gone for a check-up in the last two years, with a disadvantage for the uninsured (39.2% went for a check-up).

In terms of early detection, the entire sample was asked about blood pressure and cholesterol checks. In the specific case of women, they were also asked about Pap smears, while questions about mammograms were restricted to women over 40 at the time of the interview. 73.4% reported that their blood pressure was checked in the last year, and 69.6% indicated that they had a cholesterol test during the last five years. For both types of screenings, the percentage for the uninsured was significantly lower compared to the other coverage groups. The percentage of women surveyed who indicated that they had had a cervical cancer screening (Pap smear) in the last three years was 72.8%, a percentage that fell to 55.6% for the uninsured group. Likewise, 59.7% of all women over 40 reported having had a mammogram in the last three years. 40.3% of women over age 40 had undergone both of these tests

together, with a significant gradient for those without health insurance (11.4%).

The percentage of men who reported having had their blood pressure checked in the last year and having had a cholesterol test in the last five years was 70.2% and 75.1%, respectively. 57.6% of respondents had had these screenings, with a significantly lower percentage for the uninsured (30.0%) compared to those enrolled in social

security (63.6%), private insurance (58.3%) and the public system (57.2%).

A significant percentage (84.5%) were confident that their chronic illness could be managed. This figure varied widely, since the percentages for those with access to health insurance reflect high values (from 81.5% to 94.9%), while for the uninsured, the percentage was just 56.5%.

Table 7.6. Prevention, detection and management of chronic diseases in Mexico.

CHARACTERISTICS	UNINSURED (%)	PUBLIC (%)	SOCIAL SECURITY (%)	PRIVATE (%)	TOTAL (%)
Prevention					
The PCP sent a reminder for a check-up	17.4 ^{b, c}	21.7	27.9	19.0	23.8
The PCP discussed healthy lifestyles (diet, physical activity, stress factors)	29.9 ^b	37.1	45.2	41.6	40.9
Had a preventive care visit (check-up) in the last two years	39.2 ^{a, b}	62.5	67.1	57.9	60.5
Timely screening tests in women					
Women who had their blood pressure checked in the last year	50.9 ^{b, c}	71.4	78.6	83.4	73.4
Women who had their serum cholesterol checked in the last year	53.8	64.6	73.8	78.9	69.6

Tabla 7.6. Continues from previous page.

CHARACTERISTICS	UNINSURED (%)	PUBLIC (%)	SOCIAL SECURITY (%)	PRIVATE (%)	TOTAL (%)
Timely screening tests in women					
Basic screening tests for women (blood pressure and cholesterol check)	29.4 ^{b,c}	50.9	60.8	67.9	54.2
Women who underwent a Pap smear in the last three years	55.6 ^b	75.7	78.2	71.6	72.8
Women over age 40 who had a mammogram in the last three years	47.0	63.9	64.8	54.2	59.6
Early detection tests for women over age 40 (blood pressure, cholesterol check, Pap smear and mammogram)	11.4 ^{b,c}	47.4	45.4	49.6	40.3
Timely screening tests in men					
Men who had their blood pressure checked in the last year	43.8 ^{b,c}	67.5	75.8	73.8	70.1
Men who had their serum cholesterol checked in the last year	60.2	71.8	80.5	72.4	75.0
Basic early screening tests for men (blood pressure and cholesterol check)	30.0 ^{b,c}	57.5	63.6	58.3	57.5
Management of chronic diseases					
Has a chronic illness, has confidence that he can manage his health problems	56.5	94.9	81.5	94.0	84.5

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status. Prevalence of the variables for prevention and management of chronic diseases also sex-adjusted.

a. Value differs from the result for the public system ($p < 0.05$).

b. Value differs from the result for social security ($p < 0.05$).

c. Value differs from the result for private insurance ($p < 0.05$).

Access and coordination of specialized care, hospitals and emergency services with primary care

Table 7.7 below presents the results related to the use of specialty care, and the experience of users with referrals and counter-referrals between primary and specialty care. The use of specialty health services is highly valued in Mexico, as the supply within the public sector is restricted due to high demand and low supply. In addition, attending a consultation with a specialist in the private sector represents a high cost. 21.7% of those surveyed saw a specialist in the last two years. There are visible disparities: in the uninsured group, only 10.4% saw a specialist, while for those with public insurance and social security, the percentages rose to 20.7% and 25.0%, respectively. Of the total respondents, an average of 39% reported wait times under two weeks for a consultation with a specialist, and the differences are not statistically significant.

The referral process yielded a similar result for the different types of coverage: 70.0% of the sample was referred by the doctor at the regular place of care. While not all patients require referral to a specialist, when the need arises, the most important attribute of coordination of care is a short wait time for the consultation.

62.8% of the sample indicated that the specialist had basic information from the regular PCP about the reason for the consultation or exam results, a proportion that does not differ significantly by type of coverage. 67.4% reported that their

regular PCP was informed about the consultation made with the specialist.

Regarding hospitalization, overall, just 11.3% of those surveyed required hospitalization in the last two years. 13.3% indicated that they had been readmitted to the hospital after discharge or that they had to go to the emergency room, with no significant difference by coverage type, except for the uninsured, who did not state that they needed to be readmitted.

Information about medications and follow-up visits after discharge are indicators of good quality for post-hospitalization care. 68.8% of the total reported that hospital staff provided information about the medication upon discharge. In addition, 59.2% said that staff members helped coordinate a follow-up visit with the patient's health provider, a proportion that was very similar across all types of coverage, except for the uninsured, for whom both percentages were much lower (8.9% and 14.9% for the two variables, respectively). A higher percentage (73.3%) stated that hospital staff provided written information on self-care, with figures ranging from 51.8% for the uninsured to 88.6% for those with public insurance.

The emergency room in Mexico is generally interpreted as a back-up health service for patients when they cannot get regular medical attention. 30% of the sample reported having used emergency services in the last two years. Approximately one-third of the sample (34.5%) stated that they had gone to the emergency room for conditions that could have been treated at the primary level, without a significant difference by coverage type. The majority of patients (79.1%) were discharged after their visit to the emergency room. Table 7.8 presents the results of access and quality of hospitalization and emergency services.

Table 7.7. Access to specialty care and coordination with primary care in Mexico.

CHARACTERISTICS	UNINSURED (%)	PUBLIC (%)	SOCIAL SECURITY (%)	PRIVATE (%)	TOTAL (%)
Access to specialty care					
Consulted with a specialist in the last two years	10.4 ^{b, c}	20.7	25.0	21.9	21.7
Wait time for a consultation with the specialist					
< 2 weeks	59.2	33.8	35.7	52.4	38.6
Between 2 and 8 weeks	20.2	31.6	32.6	33.2	32.0
> 8 weeks	4.4 ^b	26.9	24.0 ^c	6.2	18.6
Coordination between PHC and specialty care					
It is necessary to ask for a referral for specialty care	64.5	65.7	69.5 ^c	51.8	64.5
The referral process was carried out by the doctor from the regular place of care	22.3 ^{a, b, c}	71.5	77.0	63.0	70.0
The referral process was performed by a doctor who is not from the regular place of care or the emergency room	15.1	15.2	10.2	10.7	11.3
The specialist had basic medical information from the regular PCP about the reason for the patient's consultation or test results.	53.1	75.1	62.8	53.8	62.8
After consultation with the specialist, the regular PCP was informed about the recommendations made by the specialist	36.2	71.8	72.3	57.4	67.4

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for the public system ($p < 0.05$).

b. Value differs from the result for social security ($p < 0.05$).

c. Value differs from the result for private insurance ($p < 0.05$).

Table 7.8. Need for hospitalizations and use of emergency services in Mexico.

CHARACTERISTICS	UNINSURED (%)	PUBLIC (%)	SOCIAL SECURITY (%)	PRIVATE (%)	TOTAL (%)
Hospitalization					
Required hospitalization in the last two years	8.2	13.0	13.7	7.0	11.3
After discharge, patient was readmitted or had to go to the emergency room	0.0 ^b	38.0	30.9	23.2	13.3
Hospital staff provided information about medication upon discharge	8.9 ^{a, b, c}	85.3	79.0	66.0	68.8
Hospital staff helped coordinate a follow-up consultation	14.9 ^{a, b, c}	78.3	63.0	66.7	59.2
The hospital staff provided written information about self-care	51.8	88.6	70.0	81.1	73.3
Emergency department					
Used the emergency room in the last two years	21.6	34.4	32.1	22.0	29.1
Considers that the emergency room was used for conditions that could have been treated at the primary level	55.2	25.0	35.8	40.3	34.5
After being evaluated by the emergency room, he was hospitalized or referred to another medical clinic	23.5	7.8 ^b	23.4	13.1	16.0
After being evaluated in the emergency department, the patient was discharged	75.2	90.7 ^b	73.0	84.1	79.1

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for the public system ($p < 0.05$).

b. Value differs from the result for social security ($p < 0.05$).

c. Value differs from the result for private insurance ($p < 0.05$).

Discussion

The main results indicate that Mexico's health sector policies need to progress; however, users' critical view highlights strengths and areas of opportunity in different survey domains.

The users' responses suggest ten findings. First, they highlight the fragmentation of the system, which is reflected in the overlap of beneficiaries enrolled in public health insurance and in the persistence of a significant percentage of uninsured individuals, with less access to services and significant out-of-pocket expense. Second, they indicate that 4 out of 10 users suffer from a chronic illness, which translates into the strong demand for care that health institutions are facing. Third, they point out that Mexico's health system requires significant improvements and that, despite this, the majority of users were confident that they would be treated effectively. In addition, they note important financial and transportation barriers, which are tangible as a very high out-of-pocket expense. Fifth, they point out the persistence of organizational barriers that hinder access to services. However, they reveal that they have a doctor whom they see regularly, and they state that they perceive their interpersonal relationship with the doctor and his ability to resolve their health problems to be of very good quality. Eighth, they allow for the identification of significant deficiencies in the quality of attention, in addition to demonstrating that the supply of preventive services for chronic diseases is insufficient. Finally, they show the limitations of specialty services whose use is scant, which are accompanied by poor communication between primary and specialty care and excess demand for emergency services due to insufficiencies in the supply of primary care.

The fragmentation of the Mexican health system is observed in its different systems, whose diverse populations enjoy various benefit plans (Bossert *et al.* 2014), a complex situation that has serious consequences and generates inefficiencies. The overlap of beneficiaries with public insurance plans means greater spending on health. The lack of an information system that links the beneficiary lists of various institutions in order to identify users who migrate from one institution to another has a budgetary and programmatic impact. Additionally, differences in benefit plans, in favor of social security, are an incentive for adverse selection, as patients with more health problems will choose to enroll in this system, regardless of their enrollment in *Seguro Popular*. It should be noted that there is still a significant percentage of people without health insurance, even in urban areas, a situation that must be given more attention, as it is clear that the goal of universal coverage has not yet been achieved.

Chronic diseases in Mexico represent a challenge for health systems and for society. In the sample analyzed, 34.8% of those surveyed had a chronic disease. Figures for the population over age 20 reveal the magnitude of this problem: overweight/obesity in 70% (OECD 2017), hypertension in 31.5% (Campos-Nonato *et al.* 2013), and diabetes in 15% (IDF 2015). The consequences for health services translate into ongoing care for conditions that evolve into complications and disability, and whose cost of care is increasing. The course of chronic disease is always toward physical deterioration and dependence, and the only way to slow this process is through the early detection of both the incipient disease and its complications, which are delayed as long as high-quality care is provided to the patient (Murray *et al.* 2005). From the social

perspective, manifestations of chronic illness are characterized by the continuous use of services, absenteeism from work in the economically active population, and a reduction in family income.

Mexico's health system requires significant improvements, yet the majority of users were confident that they would be treated effectively. Users' responses about the health system indicate that fundamental changes are required, including some that mentioned that the system needs to be overhauled. In the eyes of users, it is advisable to increase the perceived value of public health services. This is due to the fact that participants considered it more valuable to use private services, since they are confident that they will receive better care *because they are paying for it*. An in-depth analysis of this result indicated that financial and transportation barriers are tangible as a very high out-of-pocket expense, influencing the negative perception of users (Pérez-Cuevas *et al.* 2017). Financial barriers were significant for all participants, particularly those in the public health system, who eventually chose not to seek medical attention because they could potentially incur out-of-pocket expenses. Public health system users may not be fully aware that they are entitled to receive medical care and medicines without having to pay for them, although it is important to mention that there is uncertainty as to whether public health services dispense all prescribed medications. In addition, public insurance does not cover the cost of some laboratory studies. Participants considered that there are still organizational barriers, mainly to obtaining medical attention on evenings and weekends. Nevertheless, the wait time to receive medical attention and get an appointment is short compared to the average time in OECD countries,

which is several days. The practice of requesting an appointment is increasingly common among health service users, and for institutions it is a means of achieving greater efficiency in service delivery. Only 14% of participants were unable to get a medical appointment. Transportation difficulties were minor, possibly because the survey focused on participants living in urban environments.

Users reported that they had a doctor that they see regularly. The experiences and perceptions of primary care among participants indicate that, despite the organizational differences in health systems, primary health care services are available to all health insurance beneficiaries, who felt that they were able to use them. The availability of a regular source of care is an attribute of primary care, to which we can add that respondents perceived very good quality in terms of the interpersonal experience with the doctor and the doctor's resolution of their health problems. This finding indicates that from the patient's perspective, the quality of primary care is acceptable, but the results of the technical dimension of quality reveal that there is an information asymmetry between users and providers, as well as a need for users to be better informed about services. Deficiencies in technical quality were identified in the inappropriate use of medications, in terms of the low proportion of patients whose prescribed medications were reviewed and to whom the side effects were explained. In both cases, participants mentioned that the doctor did not address these issues during the consultation.

The high proportion of patients with chronic diseases has not triggered more intensive actions to increase the supply of preventive services. Preventive care activities are relevant to slow the rate of prevalence of

chronic diseases. The figures emphasize that there is a large gap between the high prevalence of chronic diseases and the number of people receiving preventive care. Tips to improve lifestyle represent a crack that has not been filled. The population of Mexico reflects a trend toward an increase in chronically ill patients, in whom exposure to modifiable risk factors—sedentary behavior, smoking, unhealthy diet, and excessive consumption of alcohol—has not decreased (Gutiérrez 2013). The detection of chronic diseases is another area that requires strengthening. A significant proportion of the participants were not screened for these diseases. These results indicate disparities in access to timely detection services in different population groups. The consequences are important, since lack of access to timely detection carries with it the development of these conditions, whose supply of services is more common in the public sector. Due to the high cost of treatment, patients do not go to private services, resulting in a significant burden that could be mitigated if private insurance were incentivized to carry out these prevention and detection activities routinely, and whose cost is lower in comparison with the cost of treating a chronic disease.

There is a limited supply of specialty services, which is accompanied by poor communication between different levels of care, delays in surgery, and excessive demand for emergency services. Participants considered that there is no coordination between PCPs and other providers, regardless of the type of health coverage. This finding indicates a breach in the communication between primary care and specialty care, which should not occur in public systems, where the structure is based on levels of care, and referral (from PCP to specialist) and counter-referral systems (from specialist to PCP) should

be calibrated. This finding emphasizes the need to promote the perspective of care networks, although it is essential to consider that the growing prevalence of chronic diseases has not been accompanied by parallel growth in the supply of primary and specialty care services, which may influence this lack of bidirectional communication between the different levels of care.

Conclusions

Despite the important progress that Mexico's health system has achieved, from the user perspective it is possible to confirm that a fragmented health system persists. Advances towards universal coverage have been made; however, current policies require a greater effort to fully facilitate access to services and provide financial protection, since they do not significantly reduce out-of-pocket expenses. The latter was highlighted in the present study, as there were users who would not seek health services due to an inability to cover the economic cost. Those surveyed considered that the health system needs fundamental changes, although they are satisfied with the care. This finding brings to light the information asymmetry between users and providers, since limitations exist in the technical dimension. Additionally, the health sector has ample room for improvement to functionally link primary care with specialty care, which makes it justifiable to strengthen the redesign of services using a care network perspective.

The federal government's initiative to launch the Comprehensive Health Care Model describes the basic strategies: renewing primary health care, strengthening local health systems,

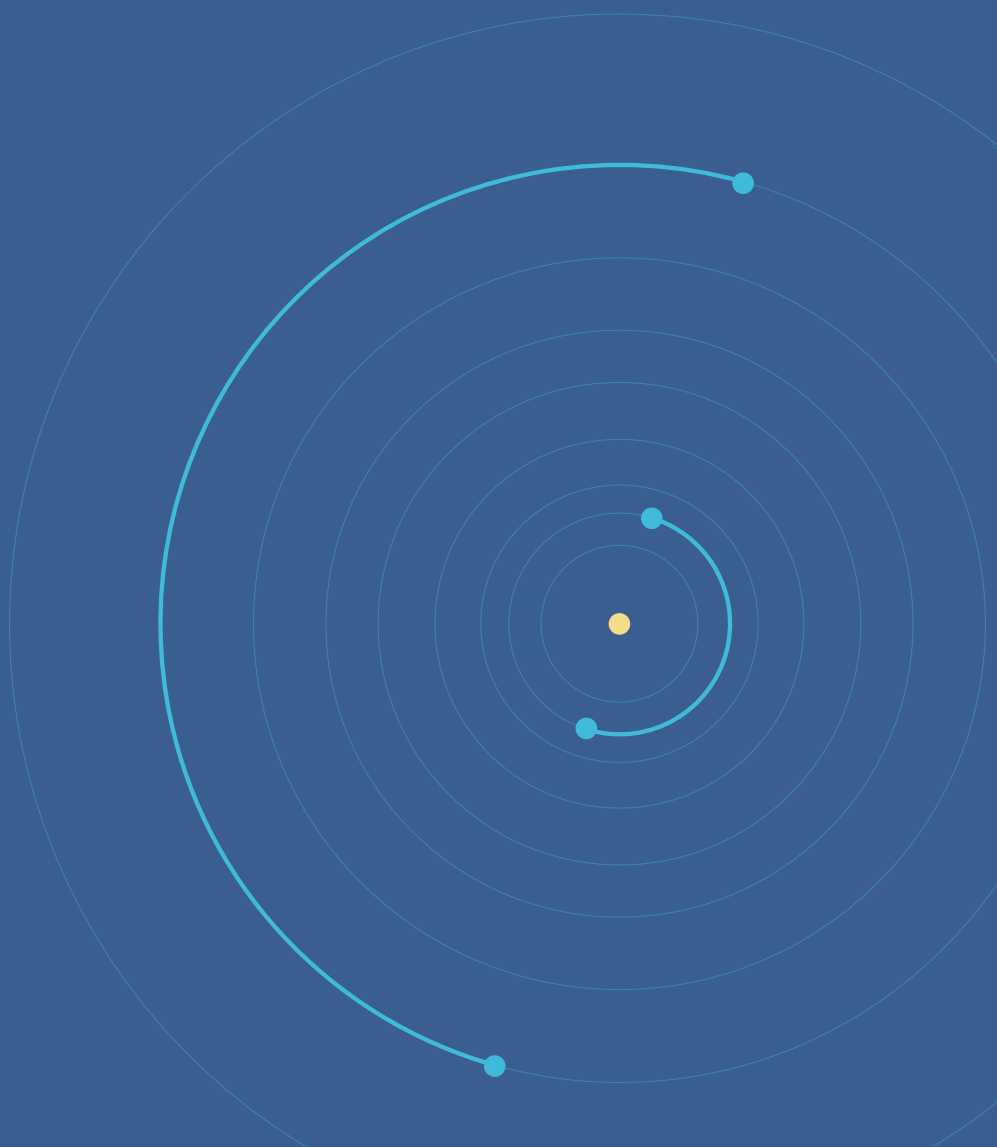
strengthening integrated health service networks, and promoting citizen participation and development (Ministry of Health of Mexico 2015); however, its implementation has not been concretized. We hope that the results can guide

strategies that aim to make services more user-focused and to reduce inequities in access and out-of-pocket expenses. In this way, the population will have the certainty of having high-quality health services that they can use at any time.

The Experience with Primary Health Care in Panama

8

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Epidemiological profile and characteristics of Panama's health system

In 2015, Panama recorded a per capita GDP of US\$ 13,268, which places the country above the regional average in terms of income level, and for the 2011 to 2015 period, its average annual growth was 7.9% (WB 2017). Poverty and inequality have been steadily declining in the last few years, and in 2014 around 3.1% of the population had a daily income of less than US\$ 3.10, adjusted for purchasing power parity. For 2014, total health spending in Panama was 8% of GDP, around US\$ 960 per person, and that same year, government spending on health was 5.9% of GDP, approximately US\$ 702 per person (WHO 2017). In terms of total health expenditure, 73% was public and 27% was private, with out-of-pocket spending corresponding to 22.3% of the total expenditure.

Like most countries in the LAC region, Panama is in a process of demographic and epidemiological transition. In the last 14 years, life expectancy at birth increased 2.5 years, and according to 2014 indicators, Panamanian women and men can expect to live 80.7 and 74.6 years, respectively (WB 2017). In turn, the proportion of adults over 65 is growing at a rate higher than that of the total population. In Panama, this age group is expected to increase from 5.5% in 2000 to 18.4% in 2050, positioning Panama as a country with more than 800 million older adults.

According to 2015 data from the IHME, the burden of disease, measured in DALYs, attributed to NCDs is 70.9%, 14.8% for injuries, and 14.2% for infectious and maternal and child diseases (IHME 2015). The burden of NCDs is on the rise, displacing injuries and infectious and maternal and infant diseases.

The following NCDs predominate: cardiovascular diseases (10.5% of total DALYs); mental disorders and substance abuse (9.1%); different types of cancer (9.1%); other non-communicable diseases (11.9%); and diabetes, urogenital, hematological and endocrine diseases (9.0%). Among the main risk factors for NCDs are high systolic blood pressure (10.1% of total risk attributable), high body mass index (7.7%), high fasting plasma glucose (12.1%), compromised kidney function (5.5%), and high levels of total cholesterol (4.3%).

The Panamanian health system has two main coverage schemes: (1) the contributory scheme administered by the Social Security Fund (CSS), which covers around 74.2% of the population, about 2.9 million people; and (2) the subsidized scheme administered by the Ministry of Health (MINSa), which serves about 25.8% of the population, about one million people (INEC 2017). The aforementioned funding entities for these public health services contribute about 70% of the resources used, leaving 30% as out-of-pocket spending by citizens (MINSa 2016). Furthermore, individuals can purchase private health insurance on the market, typically in addition to the contributory social security coverage.

The increase in the prevalence of chronic conditions presents a challenge for the functioning of health services. In order to deal with this new disease profile, an improvement in the resolution capacities of

primary care services is required, together with the management of complex and integrated service networks (PAHO 2011). However, to date there are few sources of information about the performance of health services in Panama, especially from the patient's perspective.

The last major reform observed in the country's health system was the new organic law for the CSS in 2005, which changed financing instruments and amounts for social security (National Assembly 2005). In the health care field, the CSS launched an effort in 2013 to modernize primary health care, but to date there are no studies or published evaluations of its results. In turn, MINSa has worked in recent years to expand service coverage and strengthen primary care, with an emphasis on improving equity. The main elements of the model adopted by the Ministry of Health consist of a family and community orientation, emphasis on promotion and prevention, and comprehensive, integrated and continuous care (Giraldo and Vélez 2013), but this model was never evaluated from a broad perspective or with national representativeness. Therefore, the results of the administration of a variation of the Commonwealth Survey in the country offer a valuable opportunity in a context in which there is no national data on the experience with primary care. This survey will also allow for the characterization of the country's health system based on the experience of its users.

Below, we present the results obtained about the general perceptions of the users of the health system in Panama, the financial and physical access to health services, the perceptions about the quality of primary care, and data about specialty care, in addition to the results related to

the use of emergency services and hospital services. We discuss what these data mean in the context of Panama, and what can they tell us about the gaps that exist in the health system and the inequities between the main subsystems: (a) the contributory scheme, financed predominantly by payroll taxes on formal workers; (b) the subsidized scheme, which is financed by general taxes and includes the poorest people and informal workers; and (c) those who decide to acquire supplemental private insurance, regardless of their enrollment in one of the two government subsystems. To facilitate reading and comparability among the six countries included in the 2013 version of the survey in LAC, this chapter uses the term “social security” for those enrolled in the contributory scheme, “public” to refer to those enrolled in the subsidized regime, and “private” to refer to those who have enrolled in an additional private plan.

Characteristics of the sample and general perceptions of the health system

The majority of the sample falls within the social security and private insurance group—1,298 people compared to 174 people in the public coverage group. To obtain a better approximation of national representativeness, sample weights were applied during data analysis to reflect a figure close to the country’s adult population. Table 8.1 below presents the general characteristics of the population under study.

The weighted percentages are as follows: public system, 15.3%; social security, 63.6%; and private insurance, 21.1%. About half of the respondents are women, with no significant difference by coverage type. In contrast, the proportion with an education level of primary school or lower is greater among the public coverage group (51.1%) and those enrolled in social security (44.1%), as compared to those with private insurance (30.9%). The percentage of users who indicate that they have been diagnosed with at least one chronic disease is 44.4% for public system users, 37.8% for those in the social security system, and 35.5% for those with private insurance, with no significant difference between the three coverage systems. 18.6% of the sample reported a low subjective perception of health status, and no difference was noted between the groups.

Table 8.2 presents the population’s perceptions of the health system. With regard to general perceptions, 8.6% of the sample says that the health system works well and that only minor changes are needed to make it work better. The majority of respondents (62.2%) indicated that the health system has some positive aspects but that fundamental changes are needed to make it work better. 56.4% of the respondents indicated that they have confidence in receiving the most effective treatment, including medicines and diagnostic tests. The difference between the prevalence reported by those enrolled in the public system, social security and private insurance for all the variables in table 8.2 was not statistically significant, since the results are adjusted by sex, age, level of education, and self-reported health status.

Table 8.1. General characteristics of the sample by type of coverage in Panama.

CHARACTERISTICS	PUBLIC	SOCIAL SECURITY	PRIVATE	TOTAL
Number of respondents (n)	174	959	339	1,472
Weighting (%)	15.3	63.6	21.1	100.0
Sex (%)				
Women	56.2	51.6	47.2	51.4
Age (%)				
18–25	26.7 ^a	16.4 ^b	23.0	19.4
26–35	17.0	21.2	19.1	20.1
36–45	21.3	20.1	19.0	20.1
46–59	22.9	20.3	19.4	20.5
60+	12.1 ^a	22.0	19.5	20.0
Education (%)				
Primary	51.1 ^b	44.1 ^b	30.9	42.5
Secondary	41.1 ^{a, b}	29.7	31.2	31.9
University	7.8 ^{a, b}	26.2 ^b	38.0	25.7
Health status (%)				
At least one chronic disease	44.4	37.8	35.5	38.4
Two or more chronic diseases	15.4	19.9	16.9	18.6
Low subjective perception of health status	22.5	19.3	13.6	18.6

Notes:a. Value differs from the result for social security ($p < 0.05$).b. Value differs from the result for private insurance ($p < 0.05$).

Table 8.2. Perceptions and confidence in the health system in Panama.

CHARACTERISTICS	PUBLIC (%)	SOCIAL SECURITY (%)	PRIVATE (%)	TOTAL (%)
Perceptions				
The system works quite well and only minor changes are needed to make it work better	6.6	8.6	9.0	8.6
Our health system has some positive aspects, but fundamental changes are needed to make it work better	71.1	60.8	62.0	62.2
There are so many problems in our health system that we must completely overhaul it	20.7	28.6	26.5	26.5
Confidence				
Confidence in receiving the most effective treatment, including medications and diagnostic tests	52.7	56.3	61.4	56.4

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

There are no statistically significant differences between the three subgroups for the variables indicated in the table.

Barriers to access services

Table 8.3 presents the respondents' answers about financial and transportation barriers in accessing health services. Confidence in ability to pay for treatment is similar for all coverage types. Of the total respondents, 60.4% said they have confidence in their ability to pay for necessary treatment, 11.9% reported that they had medical problems but did not go to a doctor due to the cost, and 15.5% stated that they skipped a medical exam, treatment or follow-up visit for the same reason, with no significant differences between the groups. The vast majority of the sample

reports having had out-of-pocket expenses in the last year (93.1%). Out-of-pocket expenses over US\$ 200 and over US\$ 500 are more frequent among those with public insurance (80.5% and 60.1%, respectively) than among social security users (64.6% and 44.2%, respectively). The percentage of those who had serious problems paying out-of-pocket expenses are similar between groups (12.4% for public coverage, 8.5% for private coverage, and 13.7% for social security). Transportation barriers are less common, with only 7.0% of respondents reporting that they did not see a doctor due to difficulties of this type.

A second important set of access barriers are those related to the organization of health

Table 8.3 Financial and transportation barriers in Panama.

CHARACTERISTICS	PUBLIC (%)	SOCIAL SECURITY (%)	PRIVATE (%)	TOTAL (%)
Financial barriers				
Confidence in being able to pay for a treatment if necessary	59.7	59.1	65.9	60.4
Had medical problems but did not go to a doctor because of the cost	15.1	10.8	11.7	11.9
Did not go for an exam, treatment or follow-up visit due to cost	20.7	14.2	14.7	15.5
Out-of-pocket costs				
Had out-of-pocket costs	95.9	91.1	6.0	93.1
Had out-of-pocket expenses > US\$ 200	67.8	64.6 ^a	80.5	68.8
Had out-of-pocket expenses > US\$ 500	50.0	44.2 ^a	60.1	49.0
Had serious problems paying out-of-pocket expenses	12.4	8.5	13.7	10.0
Transportation barriers				
Did not see a doctor because of transportation difficulties	5.2	7.8	6.2	7.0

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for private insurance ($p < 0.05$).

services, facilitating their use in a manner compatible with the daily activities of users. Table 8.4 below presents the respondents' answers about organizational barriers to accessing health services. The majority of the sample (74.4%) visited the primary care center at least once in the last year, with no difference by type of coverage, and 15.3% of those surveyed said that they had skipped a medical exam, treatment or follow-up

visit due to difficulties in scheduling an appointment, with no significant differences between groups. 76.0% of respondents indicated that they could schedule an appointment by phone, mail or web, but the average prevalence conceals significant differences between the public group (49.8%), the social security group (79.9%), and the private insurance group (89.2%). Furthermore, 70.4% of all respondents

report that the difficulties in obtaining medical care on evenings, weekends, or holidays prevent access to care without having to go to the emergency room.

Most indicate a wait time of less than two days (52.5%), with no significant difference between the three coverage systems. However, 16.2% of all respondents said they had waited more than two weeks or had never received care, without any difference by type of coverage.

Experience with the use of PHC

Table 8.5 presents the results of users' experience with primary health care services. The population sample for the questions on experience with primary care is composed of those who report having a clinic or regular doctor, so that they can evaluate the entirety of care received rather than each individualized interaction. The measures of experience with the use of primary care were divided into three

Table 8.4. Organizational barriers and time to access primary care in Panama.

CHARACTERISTICS	PUBLIC (%)	SOCIAL SECURITY (%)	PRIVATE (%)	TOTAL (%)
Organizational barriers				
Visited the primary care center at least once in the last year	77.0	75.5	70.5	74.4
Did not go for an exam, treatment or follow-up visit due to cost	18.1	15.5	12.5	15.3
Appointment can be scheduled with the PC clinic by phone, mail, or online	49.8 ^{a, b}	79.9 ^b	89.2	76.0
Difficulty in obtaining medical attention on evenings, weekends, or holidays prevents access to care without having to go to the emergency room	71.2	72.6	63.9	70.4
Time to access primary care provided by a doctor or nurse				
Same day or next	59.7	49.8	55.5	52.5
> 2 weeks or never	15.0	15.08	18.6	16.2

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for social security ($p < 0.05$).

b. Value differs from the result for private insurance ($p < 0.05$).

dimensions: (1) the alignment with a patient-centered PHC model; (2) the focus of the patient's experience; and (3) the perception of the quality of care.

In the first of these dimensions, 8.0% of respondents said they had primary care with the attributes of a patient-centered PHC, with the private sector (16.5%) standing out from the public system (6.4%) and social security (6.2%). Among the four variables that describe a patient-centered PHC model, 56.1% of the respondents indicated that they have a regular place of care or doctor. About half of the sample (47.3%) stated that communication with the PC clinic during the day was easy. 73.8% indicated that the PCP is familiar with important information from their medical history. The results related to the coordination of care are less positive, and a substantial difference is noted by type of coverage. Only 27.7% of respondents with public coverage, 32.8% with social security, and 53.0% with private insurance reported that the PCP coordinated their care, with a significant difference between the groups.

With regard to the patient's experience, 75.2% of the sample stated that the PCP allows them to ask questions about the recommended treatment. However, when asked if the PCP spent enough time with them, only 43.0% of the public coverage group responded affirmatively, compared to 49.7% of the social security group and 68.6% of the private insurance group. Alternatively, 75.8% of all respondents said that the PCP explained the situation in a way that is easy to understand, and 74.5% indicated that the doctor also solves the majority of their health problems, without a significant difference between the groups. Of the patients taking medications, approximately half (50.3%) say that the PCP reviewed the medications they were taking, including

those prescribed by other doctors. 75.5% of those with private insurance reported that the PCP reviewed their medications, compared with 49.9% of public system users and 44.6% of social security beneficiaries. 61.2% indicated that potential side effects were explained to them.

Only 32.2% of the total respondents reported having perceived very good quality in primary care services, with a significantly higher percentage among private insurance users (45.0%), compared to those in the public system (21.3%). 25.5% of public system users, 22.8% of social security beneficiaries, and 17.9% of those with private insurance had a medical problem that took a long time to be properly diagnosed.

Table 8.6 presents the results of prevention, detection and management of chronic diseases. There was no statistically significant difference between the three insurance subgroups (public, social security, and private), considering the risk adjustment by sex, age, level of education and self-reported health status. It is noted that, in the three groups of patients, the levels of proactivity of primary care were low: only about 31.8% of people received check-up reminders. 38.0% of the sample indicated that the PCP discussed issues related to healthy lifestyles, such as diet, physical activity and stress factors, with the public system performing best.

With regard to blood pressure, 68.3% of men reported having their blood pressure checked in the last year, compared to 82.4% of women. In terms of cholesterol tests, screening rates are much lower for both sexes, but the same trends are observed in the differences between men and women and between types of coverage. 35.5% of men reported that

Table 8.5. Experience with primary care in Panama.

CHARACTERISTICS	PUBLIC (%)	SOCIAL SECURITY (%)	PRIVATE (%)	TOTAL (%)
Patient-centered PHC				
Has a doctor and/or health service that patient regularly visits	54.1	59.0	49.6	56.1
Communication with the PC clinic during the day is easy	44.9	44.0	57.4	47.3
The primary care physician (PCP) is familiar with important information about the patient's medical history	74.2 ^a	71.2	81.8	73.8
PCP helps coordinate care	27.7 ^a	32.8 ^a	53.0	35.6
Has patient-centered PHC	6.2	6.4 ^a	16.5	8.0
Patient experience				
The PCP allows the patient to ask questions about the recommended treatment	77.2	72.1 ^a	85.0	75.2
The PCP spends enough time with the patient	43.0 ^a	49.7 ^a	68.6	51.9
The PCP explains the situation in an easy-to-understand way	82.9	74.2	75.9	75.8
The PCP finds a solution to most of the patient's health problems	82.7	71.8	75.5	74.5
The PCP reviewed the patient's medications	49.9	44.6 ^a	75.5	50.3
The PCP explained the potential side effects of medications	66.5	54.8 ^a	80.7	61.2
Perception of quality				
Perception of very good quality with regard to primary-level care	21.3 ^a	31.6	45.0	32.2
Had a medical issue and it took a long time to receive an adequate diagnosis	25.5 ^a	22.8 ^a	17.9	22.1

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for private insurance (p<0.05).

their cholesterol has been checked in the last five years compared to 45.8% of women. Female respondents were also asked if they had had a Pap test in the past three years, and women over 40 were asked if they had had a mammogram in the past three years. Screening rates were higher for both tests in comparison to, for example, cholesterol checks: 83.0% of women said they had undergone a Pap test in the last three years and 72.4% of women over 40 said they had undergone a mammogram in the last three.

Access and coordination of specialized care, hospitals and emergency services with primary care

To complement the resolution capacity of primary care, it is essential to have a support network of specialty care that solves the most complex problems ideally in a coordinated manner, with defined protocols and information exchange. Table 8.7 presents the results related to the use of specialty care, and the experience of users with referrals and counter-referrals between primary and specialty care. Only 25.2% of respondents indicated that they had consulted a specialist in the last two years, with no significant difference by coverage type. The wait time for a consultation with the specialist is shorter for those with private insurance: 47.5% indicated a wait time of less than two weeks, compared to 25.1% for public system users and 23.4% for social security beneficiaries.

The majority of patients (68%) were referred by their regular doctor. Respondents from the private insurance group reported that having a referral was less necessary (58.1%) compared to public system users (86.9%) and social security beneficiaries (80.4%). 62.5% of all respondents said that the specialist had basic medical information from the patient's regular doctor about the reasons for the consultation. 56.4% indicated that following the consultation with the specialist, the patient's regular doctor was informed about the recommendations made, without significant differences between coverage groups for both variables. This suggests that the coordination of care between different levels is a challenge both in the public system and in the contributory systems.

Table 8.8 presents the results related to the utilization of hospitalization and emergency services. 5.8% of the sample reports having been hospitalized in the last two years, with no difference by type of coverage. Social security users seem to have experienced more rehospitalizations or readmissions after discharge from the hospital: 1.7% of public system users, 15.3% of those with social security, and 0.8% of those with private insurance indicate having been readmitted or having to go to the emergency room after discharge. 76.4% of those in the public system, 67.9% of social security beneficiaries, and 98.4% of those with private insurance said that hospital staff gave information about medications at the time of discharge. 76.5% reported that hospital staff helped them coordinate a follow-up consultation with their health provider, without significant difference by coverage type. 67.3% report that they received written information on self-care

Table 8.6. Prevention, detection and management of chronic diseases in Panama.

CHARACTERISTICS	PUBLIC (%)	SOCIAL SECURITY (%)	PRIVATE (%)	TOTAL (%)
Prevention				
The PCP sent a reminder for a check-up	28.4	33.1	32.3	31.8
The PCP discussed healthy lifestyles (diet, physical activity, stress factors)	43.5	36.7	40.3	38.0
Had a preventive care visit (check-up) in the last two years	59.4	63.7	62.5	62.3
Timely screening tests in women				
Women who had their blood pressure checked in the last year	75.4	83.8	82.8	82.3
Women who had their serum cholesterol checked in the last year	43.9	45.7	47.8	45.8
Basic screening tests for women (blood pressure and cholesterol check)	38.4	37.9	41.1	38.6
Women who underwent Pap smear in the last three years	82.7	84.5	82.3	83.0
Women over age 40 who had a mammogram in the last three years	81.5	72.0	71.0	72.4
Early detection tests for women over age 40 (blood pressure, cholesterol check, Pap smear and mammogram)	44.8	27.4	23.9	28.4
Timely screening tests in men				
Men who had their blood pressure checked in the last year	67.8	67.7	70.0	68.3
Men who had their serum cholesterol checked in the last year	31.9	36.4	35.5	35.5
Basic early screening tests for men (blood pressure and cholesterol check)	21.3	28.5	31.2	28.1
Management of chronic diseases				
Has a chronic illness, has confidence that he can manage his health problems	94.4	93.2	92.4	93.3

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status. Prevalence of the variables for prevention and management of chronic diseases also sex-adjusted. There are no statistically significant differences between the three subgroups for any of the variables indicated in the table.

Table 8.7. Access to specialty care and coordination with primary care in Panama.

CHARACTERISTICS	PUBLIC (%)	SOCIAL SECURITY (%)	PRIVATE (%)	TOTAL (%)
Access to specialty care				
Consulted with a specialist in the last two years	22.4	23.6	33.3	25.2
Wait time for a consultation with the specialist				
< 2 weeks	23.4	25.1 ^a	47.5	30.7
Between 2 and 8 weeks	45.6	34.3	22.5	31.7
> 8 weeks	25.4	33.7	19.3	27.9
Coordination between PHC and specialty care				
It is necessary to ask for a referral for specialty care	86.9 ^a	80.4 ^a	58.1	76.4
The referral process was carried out by the doctor from the usual place of care	79.1	71.7	55.2	68.0
The referral process was performed by a doctor who is not from the regular place of care or the emergency room	11.4	12.0	11.0	11.5
The specialist had basic medical information from the regular PCP about the reason for the patient's consultation or test results.	64.0	66.6	52.8	62.5
After consultation with the specialist, the regular PCP was informed about the recommendations made by the specialist	52.9	61.1	48.2	56.4

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for private insurance (p<0.05).

from hospital staff, without differences by coverage type. It is also important to mention that the public system sample may not be very representative because it is quite small.

15.2% of respondents indicated that they had gone to the emergency room in the last two years, with no significant difference by coverage type. Only 18.8% of public system users report having gone to the emergency department for a condition that could have been treated at the primary level versus 38.1% of social security beneficiaries and 47.5% of those with private insurance. The majority were discharged after visiting the emergency department, but 18.6% of respondents were admitted or referred to another clinic, without significant difference by coverage group.

Discussion

The level of general satisfaction that Panamanians indicated with respect to their health systems is at a medium level, with most believing that the health system has positive aspects. The interesting thing is that users of the subsidized public system tend to demonstrate greater satisfaction with services: just 20.7% of public system users believe that the system should be completely overhauled, as compared to 38.6% of social security beneficiaries and 26.5% of those with private insurance. As we will see below, this general perception of public system users is not supported by the best indicators of access, quality and use.

In terms of access to primary care, public system users report higher financial barriers to accessing services, with

a greater proportion of people who skip seeing a doctor or going for tests, treatments or follow-ups due to the cost. More than 90% of people in all groups report having out-of-pocket expenses, with larger amounts paid by those with private insurance, which may be associated with higher socioeconomic status. Likewise, organizational barriers are greater for those with public insurance. The gradient of difficulty for scheduling an appointment successively declines between users of public insurance, social security and private insurance. Public system users also report much lower levels of access for scheduling appointments by phone, mail or web than do other groups. However, wait times for care are similar among users of the three groups. Most report having a regular place of care, but it is a more frequent attribute among social security beneficiaries. Those with private insurance report the greatest ease of communication with the primary care center during the day, in comparison to those with public insurance and social security.

Some of the greatest inequalities by coverage type reflected in the survey in Panama are seen in perceptions of quality, as measured by the experience of patients. About 20% of public service users indicate good quality at the primary level of care, compared with just over 30% the social security group and less than 50% for those with private insurance. Similarly, compared to patients with social security and private insurance, those served by public coverage more frequently indicate having had medical problems that took a long time to properly diagnose, as well as reporting that their PCP does not spend enough time with patients. For some responses, private insurance shows indicators far superior to public insurance and social security, such as the doctor's

Table 8.8. Need for hospitalizations and use of emergency services in Panama.

CHARACTERISTICS	PUBLIC (%)	SOCIAL SECURITY (%)	PRIVATE (%)	TOTAL (%)
Hospitalization				
Required hospitalization in the last two years	5.9	5.7	5.6	5.8
After discharge, patient was readmitted or had to go to the emergency room	1.7	15.3 ^a	0.8	5.4
Hospital staff provided information about medication upon discharge	76.4	67.9 ^a	98.4	75.9
Hospital staff helped coordinate a follow-up consultation	51.8	82.1	78.0	76.5
The hospital staff provided written information about self-care	66.8	64.9	81.4	67.3
Emergency department				
Used the emergency room in the last two years	11.5	16.6	13.6	15.2
Considers that the emergency room was used for conditions that could have been treated at the primary level	18.8	38.1	47.5	36.0
After being evaluated by the emergency room, patient was hospitalized or referred to another medical clinic	17.0	18.1	21.9	18.6
After being evaluated in the emergency department, the patient was discharged	69.4	75.1	72.2	73.7

Notes: Prevalence adjusted for sex, age, level of education and self-reported health status.

a. Value differs from the result for private insurance ($p < 0.05$).

knowledge of the patient's medical history, the possibility of asking questions during the consultation, and the care with which the doctor administers and reviews the medications prescribed to the patient. Alternatively, quality perceptions based on prevention and screening measures are more balanced for women, although there are quality deficiencies in all groups. Among women, around 30% of users of all insurance types report that they are up to date with a broad package of preventive measures (blood pressure and cholesterol checks and Pap smears).

There are inequalities in access to specialty care. 23% of public system users who consulted a specialist in the last two years had a wait time of less than two weeks, compared to 25% of users with social security and 48% of those with private insurance. The levels of coordination of care from the PCP are also lower among public insurance users, although in this subsystem the need to formally request a referral to access specialty care is more frequent.

It is difficult to draw generalizations about access to hospitalizations due to the low number of people who have had that experience. However, there seems to be a lower level of unnecessary utilization of emergency services among public insurance users than among those with social security and private insurance. For public insurance beneficiaries, use of the emergency room for conditions that could have been treated at the primary level is much lower, as is the proportion of people who were discharged after being evaluated by the emergency service.

Conclusions

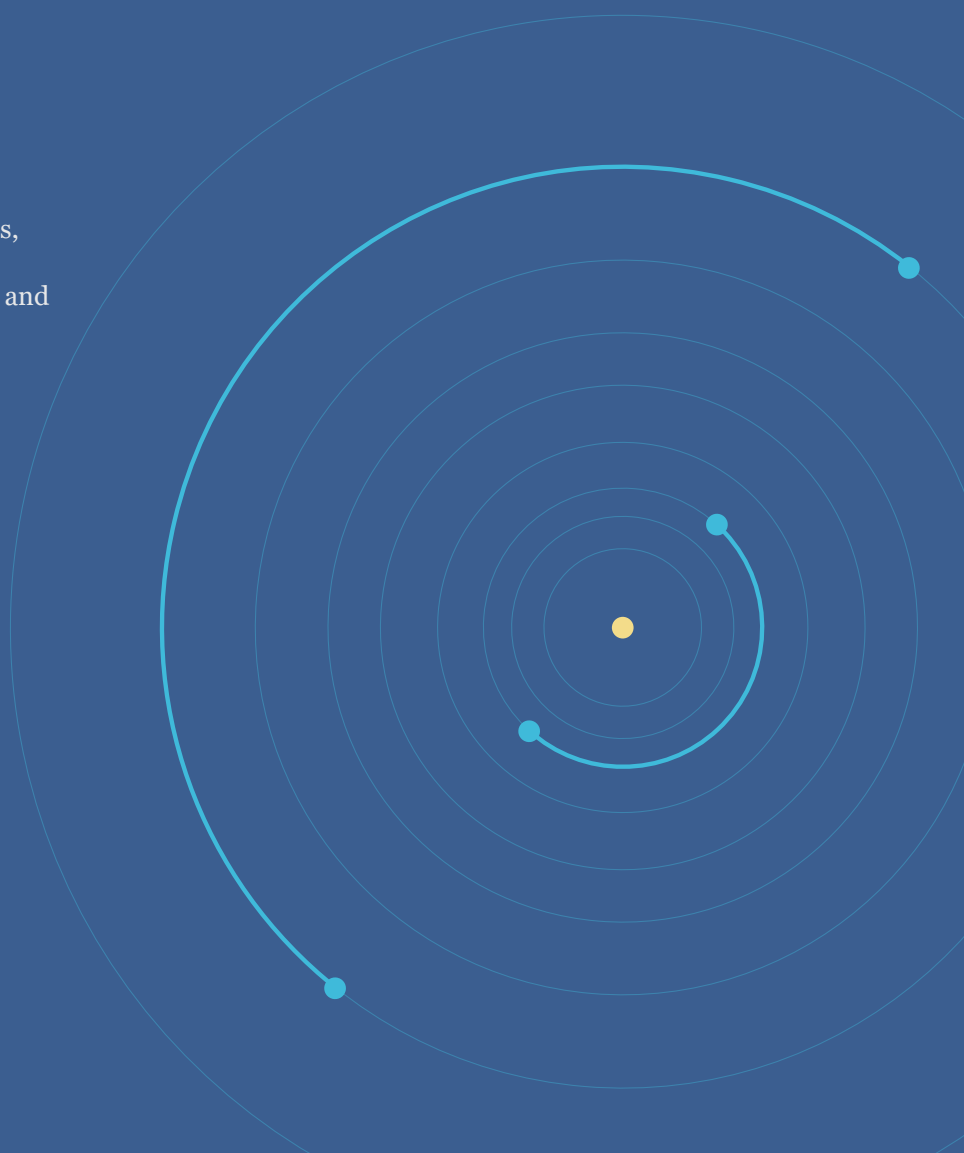
The data from the survey in Panama seem to suggest a disconnect between the general evaluation of the health system, which is similar among the three insurance subsystems, and the experiences reported by patients. Generally speaking, there are significant barriers to access among public insurance users, as shown by the inequities in access to services when comparing this group to the other two. Likewise, the reported quality of the services provided successively falls when moving from the private insurance group to the social security group to the public insurance group.

The lack of data, analysis and deeper literature about health services in Panama makes it difficult to triangulate the findings of this survey with other sources of information. However, for the same reason, the data shown in this analysis is even more important with respect to the need to strengthen primary health care in the country, as well as the urgency to reduce inequities in access, quality and the use of health services. Panama's Ministry of Health has been carrying out consultations and multidisciplinary dialogue with government and civil society stakeholders, and one of the most important results has been, precisely, the need to strengthen information systems and to have indicators for the monitoring and follow-up of funds allocated to the health system (Ministry of Health of Panama 2016). We hope that the data from this survey can support this process and contribute to the continuous improvement of access and quality to health services.

Primary Health Care and Determinants of the Perception of the Health System and Quality of Care in 17 Countries in LAC and the OECD

9

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Introduction

Despite the broad consensus that exists regarding the central role of PHC in the effective functioning of health systems, to date there are few metrics of service performance from the perspective of patients and health service users—neither among LAC countries nor from a comparative perspective with more highly developed countries. There is also a lack of evidence-based orientation about the desirable (or even theoretically possible) levels of performance of health systems in the dimensions of access, resolution capacity, integration and coordination of PHC services from an integrated service network perspective, despite the literature published in the last decade on the subject (Waibel *et al.* 2015; Vázquez *et al.* 2009; Montenegro *et al.* 2011). In this context, a comparison with the results observed in high income countries and with more consolidated health systems can be useful for the design and implementation of strategies by national governments to strengthen PHC. In addition, from the perspective of public policy formulation, it is important to examine the extent to which patients' experience with PHC is predictive of the public's evaluation of national health systems and the perceived quality of care.

With these objectives in mind, this final chapter concludes the book with a comparative analysis between the six LAC countries included in the survey (Brazil, Colombia, El Salvador, Jamaica, Mexico and Panama) and 11 high-income OECD countries (Australia, Canada, France, Germany, the Netherlands, New Zealand, Norway,

Sweden, Switzerland, the United Kingdom, and the United States). Comparative data are presented on the results of the perception of the health system, the perceived quality of care, and the experience with PHC for the 17 countries, with comparisons drawn between LAC and OECD. We present the results of multivariate analyses that examine the determinants of perception on the need for fundamental changes in the health system, as well as the perception of very good quality of care in PHC through a comparative perspective between LAC and OECD, expanding previous analyses that focused solely on LAC (Pérez-Cuevas *et al.* 2017; Doubova *et al.* 2016; Macinko *et al.* 2016). Finally, the policy implications of the findings of this study are discussed.

Methods

For the analysis in this chapter, data from the Primary Care Access, Experience and Coordination Survey in Latin America and the Caribbean, conducted in Brazil, Colombia, El Salvador, Jamaica, Mexico and Panama between 2012 and 2014, were combined with data from the International Health Policy Survey implemented by the Commonwealth Fund in Australia, Canada, France, Germany, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom, and the United States in 2013 (see chapter 2). The combined database contains a total of 28,347 observations, with weighted samples for the national population of the 17 countries.

Initially, we compared results on the perception of the health system, the perceived quality of care, and the experience with PHC, as reported by patients in the 17 countries. The variables

that measured these results were grouped into five categories: (1) overall views of the health system; (2) perceived quality of the PHC; (3) access, organizational and financial barriers; (4) experience with the PHC; and (5) prevention and basic early screening tests. Their description can be found below in table 9.1.

Subsequently, six multivariate models were constructed to identify the main determinants of the need for fundamental changes in the health system and confidence in receiving the most effective treatment, including medications and diagnostic tests. For the first three models (one for OECD countries, one for LAC countries, and one OECD + LAC), the dependent variable was the user's perception of the health system. The question used to evaluate this variable was: "Which of the following statements comes closest to expressing your overall view of the health system in this country?" The response options were as follows: (1) In general, the system works quite well and only small changes are necessary to make it work better; (2) There are some positive aspects to our health system, but fundamental changes are needed for improvement; (3) Our health system has many problems and needs to be completely overhauled; (4) Not sure; (5) Refused to respond. We divided the answers into two categories: 0 = no need for fundamental change; 1 = need for fundamental changes or complete overhaul.

For the three remaining models, the dependent variable was the perception of very good quality at the usual place of care. The question used to evaluate this variable was: "In general, how would you rate the medical care that you have received in the last 12 months at the office, clinic or health facility of your general practitioner?" The response options were the following: (1)

Table 9.1. Variables that measured the results of the perception of the health system and the experience with PHC.

DIMENSION	VARIABLE
Overall views of the health system	Perception that the health system requires fundamental changes to function better.
Perceived quality of PHC	Perception of very good quality with regard to PHC.
Access, organizational and financial barriers	<p>The time to access care from a doctor or nurse was the same day or the next.</p> <p>Difficulty obtaining medical care on evenings, weekends and holidays made it impossible to access care without going to the emergency room.</p> <p>Patient had a medical problem but did not see the doctor due to the cost and/or has skipped a medical test, treatment or follow-up visit due to the cost and/or had serious problems paying for any out-of-pocket health-related expenses.</p>
Experience with primary health care	<p>User has patient-centered PHC (has a regular doctor or place of care; the doctor or nursing staff always or frequently know relevant information about the patient's medical history; the medical care facility is easy to contact by phone during normal office hours; and the doctor or nurse always or often helps to coordinate care).</p> <p>The PCP explains the situation in a way that is easy to understand and spends enough time with the patient.</p>
Prevention and basic early detection exams	<p>Health center staff sent reminder for check-up.</p> <p>Blood pressure was checked by the doctor or nurse in the last year.</p> <p>Cholesterol was checked by the doctor or nurse in the last year.</p>

Source: Developed by the authors.

excellent; (2) very good; (3) good; (4) fair; (5) bad; (6) not sure; (7) refused to respond. We divided the answers into two categories: 0 = good, fair or poor quality; 1 = very good or excellent quality.

In the multivariate analysis, the control variables were the same ones defined for the sample of six LAC countries (see chapter 2): sex, age (five age groups, which were 18-25,

26-35, 36-45, 46-59 and 60+), education level (primary or less, complete secondary, higher education), presence of chronic disease, subjective perception of health status, and coverage type. We identified the respondent as suffering from a chronic illness if a doctor had informed him that he had arthritis, asthma or some other chronic lung disease, cancer, diabetes, heart disease, hypertension or depression. The variable

“subjective perception of health status” was classified as good (excellent, very good, good) and poor (fair and poor).

Following the methodology adopted for the six LAC countries, individuals with no other type of coverage in OECD countries were defined as “uninsured,” while “public insurance” was designated only for enrollees of said coverage (non-contributory), “social security” for enrollees of said coverage who do not have an additional voluntary private insurance plan; and “private insurance” for enrollees of said coverage, independently of any other coverage they may have. Similarly, in OECD countries, “public insurance” was defined as that financed by general taxation; “social security” as the type primarily financed through payroll taxes of formal workers; and “private insurance,” as that voluntarily acquired in private markets and financed mainly through the payment of premiums.²⁰ Due to the variation in coverage rules for each country, the number of forms of coverage that exist in each one varies (see chapter 1). Also, a fixed-effect model was specified with the inclusion of dichotomous variables for each country, in order to control for certain unobserved characteristics of the national health systems that affect all respondents uniformly.

The data was weighted using the sample weights from the survey. Descriptive statistics were used to describe the general characteristics of the population studied. In order to preserve the comparability between the populations of different countries, the descriptive statistics—except those that refer to the characteristics of the sample—were adjusted for risk, sex, age (five age

groups, which were 18–25, 26–35, 36–45, 46–59, and 60+), education level (primary or less, complete secondary, higher education), presence of chronic disease, and subjective perception of health status. Calculations of adjusted prevalence were made with the robust Poisson regression models (Chen *et al.* 2014), where the coefficients represent the prevalence rates.

To evaluate the association between the independent variables and both dependent variables, multiple Poisson weighted regressions were performed with a robust variance model, as recommended for cross-sectional studies with high-prevalence binary outcomes (Barros and Hirakata 2003). The coefficients represent the prevalence ratios (PR), and their interpretation is the same as for the relative risk ratios. The first model was controlled for sex, age, education level, presence of chronic disease, and subjective perception of health status, while, for the second, in addition to the variables already mentioned, socioeconomic status was included, given that these variables can potentially lend themselves to confusion. The analysis was performed using Stata/SE software, version 14.2 (Statacorp 2015).

Descriptive results

Table 9.2 presents the general characteristics of the population studied in the high-income OECD countries (Australia, Canada, France, Germany, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom, and the United States) and in the LAC countries, as well as a comparison of significant statistical difference between the results observed in LAC and OECD, through a robust Poisson model. All the differences

20 For these purposes, Medicaid was considered public insurance and Medicare as social security in the United States.

observed between LAC and OECD averages were statistically significant.

On average, the population of LAC is younger and has a lower level of education than that of the OECD countries. The proportion of people between the ages of 18 and 25 varied in the OECD, from 4.8% in Sweden to 13.5% in Australia, and in LAC, from 19.1% in Panama to 28.9% in Mexico. Similarly, the proportion of people age 60 or older in the OECD varied from 26.1% in Australia to 46.4% in Norway, and in LAC, from 4.1% in Mexico to 18.4% in Panama. Among the high-income OECD countries, the proportion of participants with a secondary education or less ranged from 71.5% in the United Kingdom to 99.6% in Switzerland. In LAC, the proportion of participants with a secondary education or less varied from 74.3% in Panama to 89.1% in Brazil.

In LAC, there is a lower self-reported prevalence of chronic conditions that have been diagnosed by a doctor, although the population of the region has a worse self-perception of its general health status than does the population of the OECD countries. The United States had the highest percentage of participants with chronic diseases (66.0%) and Switzerland the lowest (44.5%). The majority of participants perceived that their health status was good, ranging from 77.6% in Germany to 92.3% in New Zealand. In LAC, El Salvador had the lowest percentage of participants with chronic diseases (30.5%) and Jamaica the highest (51.7%). Most participants felt that their health status was good, varying between 78.3% in Mexico and 83.4% in Brazil.

The differences in terms of coverage are a bit more complex depending on the particularities of each country. The

distribution of coverage types varied according to the existing coverage model in each country. In the OECD countries, single public systems predominate, whether based on the Beveridge model of a national health system with financing supported by general taxation (Australia, Canada, Norway, New Zealand, United Kingdom and Sweden) or the Bismarck model of social security with financing supported by payroll contributions (Germany, Holland, France and Switzerland) (Van der Zee and Kroneman 2007). In this group, the United States stands out as a fragmented model with unusual characteristics. In LAC, the fragmentation of coverage schemes predominates, with the coexistence of public insurance, social security and private insurance, with the exception of Brazil and Jamaica, which have national health service models based on the United Kingdom's model.

Among the 11 OECD countries, the United Kingdom had the highest proportion of respondents who only have public insurance (77.3%), while Germany had the lowest percentage (0.5%). The proportion of participants enrolled in social security ranged from 23.4% in the United States to 75.9% in Germany. With regard to the percentage that had private insurance, it varied between 22.7% in the United Kingdom and 93.1% in France. For the six LAC countries LAC, Brazil had the highest proportion of respondents who only have public insurance (77%), while Panama had the lowest percentage (15.3%). The proportion of participants who had social security ranged from 42.9% in El Salvador to 68% in Colombia. In general, a small percentage of the population had private insurance, which varied between 9.3% in Colombia and 39.2% in Jamaica.

Table 9.3 presents the results of the perception of the health system and of the perceived quality of care reported by patients in the OECD countries and in the LAC countries, with risk adjustment by sex, age, education and health status. We also compared to see if there is a statistically significant difference between the results observed in LAC and the OECD through a robust Poisson model, and all the differences observed between the LAC and OECD averages were also statistically significant.

On average, in LAC countries, the population indicated a greater desire for fundamental changes in the health system and a worse perception of the quality of primary health care. In the OECD countries, the perception of the need for fundamental changes varied between 36.3% in the United Kingdom and 60.4% in France, with the United States as an outlier, with 73.2% asking for essential changes to the system so that it works better.

In LAC, dissatisfaction with the health system was considerably higher, given that between 79.8% of respondents in Mexico and 96.8% of respondents in Brazil mentioned that fundamental changes are needed in the health system. The variable that measures the perception of very good quality of care in PHC varied considerably. In the OECD countries, it went from a minimum of 50.5% in Sweden to a maximum of 82.0% in New Zealand, while in LAC it ranged between 29.6% in Colombia and 54.8% in Jamaica.

In comparison to the citizens of OECD countries, the population of LAC has less access to PHC services and greater organizational and financial barriers. With respect to the proportion of people who made an appointment with the PHC for the

same day or the next, in OECD countries it varied from a minimum of 40.8% in Canada to a maximum of 70.5% in New Zealand, while in LAC, it ranged from a minimum of 31.0% in Colombia to a maximum of 67.0% in Jamaica. In terms of other organizational barriers, in the OECD countries, difficulty obtaining medical care on evenings, weekends or holidays without needing to go to the emergency room ranged from 27.0% in Germany to 55.1% in Canada, whereas in LAC it ranged from 46.4% in Colombia to 76.6% in El Salvador. In OECD countries, financial barriers were reported most frequently in the United States (35%), and the United Kingdom had the lowest percentage (3.8%). In comparison, in LAC they were reported most frequently in Jamaica (46.0%), and Colombia had the lowest percentage (24.8%).

The variables that measure the patient experience with PHC do not favor LAC when compared to the OECD countries. The figures indicate a lower proportion of people with patient-centered PHC. In the OECD countries, the percentage of participants who reported receiving care with the attributes of patient-centered PHC—doctors explain the situation in a way that is easy to understand or spend sufficient time with the patient—ranged from 12.5% in Sweden to 52.1% in New Zealand, and in LAC it varied between 8.5% in El Salvador and 17.7% in Jamaica. Also, with regard to the variables that measure a good experience of interpersonal contact while receiving medical care—the doctor explains the situation in a way that is easy to understand and spends enough time with the patient—in the OECD countries, the percentage ranged between 72.2% in Sweden and 86.1% in Germany. In LAC, it varied between 38.0% in Brazil and 68.0% in Mexico.

Table 9.2. General characteristics of health service users in 17 countries of LAC and the OECD.

CHARACTERISTICS	BRAZIL	COLOMBIA	EL SALVADOR	JAMAICA	MEXICO	PANAMA	LAC	GERMANY	AUSTRALIA	CANADA	US	FRANCE	NETHERLANDS	NORWAY	NEW ZEALAND	UK	SWEDEN	SWITZERLAND	OECD
(n)	1,500	1,463	1,466	1,488	1,488	1,472	8,877	1,119	2,183	5,365	1,781	1,406	979	961	986	981	2,252	1,457	19,470
Women (%)	51.7	53.1	53.5	53.7	50.6	51.4	52.3	60.4	52.3	59.3	57.8	52.4	50.5	53.8	49.6	49.6	53.5	52.7	55.1
Age (%)																			
18–25	21.9	25	26.6	21.7	28.9	19.1	23.9	6.9	13.5	6.1	5.8	7.9	11.8	5.2	14.2	12.7	4.8	10.9	8.2***
26–35	23.5	27.1	23.5	23.3	24.6	20.4	23.2	14.5	17.5	11	10.5	16.8	15.6	6.7	17.7	18.1	10.2	16.5	13.3***
36–45	21.9	21.9	18.3	19.5	24.4	20.7	21.1	14.6	16.8	14.8	12.8	20.3	19.0	12.9	16.3	18.1	13.2	19.7	15.7***
46–59	19.8	18.7	18.1	19	17.9	21.5	19.6	26.8	26.1	30.4	26.8	26.6	25.2	28.8	22.8	22.0	25.6	24.9	27.0***
60+ (%)	13	7.3	13.5	16.5	4.1	18.4	13.2	37.2	26.1	37.7	44.0	28.5	28.4	46.4	29.0	29.1	46.2	28.1	35.8***
Education (%)																			
Primary	63.8	25.3	42.7	27.8	27.3	42.8	38.2	17.6	19.0	15	13.2	9.9	53.4	11.4	30.1	13.4	17.4	10	17.3***
Secondary	25.3	53.1	32.0	51.7	55.3	31.5	41.9	55.0	58.5	60.3	58.6	73.4	22.0	79.3	51.8	58.1	62.3	89.6	61.5***
Higher Ed.	10.9	21.7	25.3	20.5	17.4	25.7	20.0	27.4	22.5	24.7	28.2	16.7	24.6	9.3	18.1	28.5	20.3	0.4	21.2***
Health status (%)																			
Presence of chronic disease	34.2	32.8	30.5	51.7	34.9	38.2	37.1	55.8	49.7	57.3	66.0	56.7	52.3	63.5	57.5	46.2	58.3	44.5	55.9***
Poor self-perception of health	16.6	18.4	19.3	19.8	21.7	19.0	19.1	22.5	11.0	13.3	18.1	22.1	13.0	18.6	7.7	11.9	16.5	12.3	14.8***
Type of coverage (%)																			
Public	77.0	22.7	36.1	60.8	22.3	15.3	41.1	0.5	53.4	39.5	4.8	6.9	–	60.8	66	77.3	66.5	–	28.6***
Social security	–	68.0	42.9	–	47.7	63.6	36.9	75.9	–	–	23.4	–	29.4	–	–	–	–	42.5	18.3***
Private	23.0	9.3	21.0	39.2	18.2	21.1	22.0	23.7	46.6	60.5	61.2	93.1	70.6	39.2	34	22.7	33.5	57.5	53.1***

Note: The table presents weighted percentages from the survey. The United States and Mexico are the only countries in which there is or was an option to state if one is not covered by any type of health insurance (11.8% and 10.7% without insurance, respectively); therefore, the totals in the table do not add up to 100%. *** p<0.001 (LAC vs. OECD).

Compliance with prevention measures and routine basic exams is lower in LAC than in the OECD countries. Among those surveyed who stated that they had a check-up in the last two years, the proportion that indicated having received a reminder from PHC for said appointment varied, in the OECD countries, between 22.4% in Norway and 55.7% in New Zealand, while in LAC it oscillated between 22.1% in Jamaica and 36.8% in El Salvador. With regard to compliance with exams, the percentage of participants who indicated that “their blood pressure was checked by the doctor or nurse in the last year” in the OECD countries varied between 60.0% in Switzerland and 87.3% in the United States, while in LAC it varied between 63.8% in Brazil and 83.5% in Jamaica. The percentage of respondents who stated that “their cholesterol was checked by the doctor or nurse in the last five years,” in the OECD countries ranged from 45.6% in Sweden to 77.6% in Germany, and in LAC, the observed range was between 45.7% in Panama and 85.9% in Brazil.

The significant differences observed in the averages between the LAC and OECD countries are even more complex in terms of the multiplicity of coverage models that coexist within each LAC country and between the different OECD countries. Therefore, the interpretation of the discrepancies between the two groups of countries must consider that context. To that end, tables 9.4 and 9.5 below present the results of the same variables of access and experience with primary health care, with stratified results by type of coverage and level of education. The percentages in both tables were risk-adjusted based on the variables of sex, age, and health status, and the results of table 9.4 were also adjusted for education.

Many of the results observed in the comparison of the averages by groups of countries do not favor the LAC countries. The differences remain when populations are stratified by type of coverage (public, social security, private insurance and uninsured), with some important exceptions noted below. Some of the differences between LAC and OECD countries dwindle or disappear when the comparison is limited to those with private insurance. For this subpopulation, access to PHC on the same day or the next is better in LAC than in the OECD countries, and there are no significant differences in terms of reported organizational barriers (receiving services outside of office hours). For some other variables, such as interpersonal experience with physicians, the availability of patient-centered PHC, and blood pressure checks, the magnitude of the gradient between LAC and OECD countries is lower among the population with private insurance than among the population with public insurance and social security.

In turn, the comparison of uninsured subpopulations between LAC and OECD countries is unusual, since this subgroup can only be observed in the United States and Mexico. In that case, LAC citizens have an advantage in terms of access to PHC on the same day or the next one and lower financial barriers to receive care. Furthermore, there are no significant differences between LAC and the OECD countries in terms of general perception of the health system, perceived quality of PHC, interpersonal experience with physicians, check-up reminders, and compliance with cholesterol checks.

The comparison between groups of countries with populations stratified by education (complete primary or less, complete secondary or incomplete higher

education, complete higher education or more) offers the possibility of a comparison adjusted for a *proxy* of socioeconomic status, considering the correlation between education and income. In that case, the results also remain relatively stable, with a gradient that does not favor the LAC population. The statistically significant difference between populations with higher education in LAC and OECD countries disappears in two dimensions: the level of access to PHC on the same day or the next and compliance with blood pressure checks.

Analytical results

The analyses sought to identify to what extent the variables of access and experience with the PHC and compliance with check-ups are correlated with the view of the health system and perceived quality of care. Table 9.6 shows the results of the robust Poisson multivariate regressions for the models that study the determinants of perception about the need for fundamental changes in the health system and the perception of very good or excellent quality of PHC, for both LAC and OECD countries. The Pearson statistics for the *goodness-of-fit* of the six regressions confirm that the Poisson model is the suitable choice for the analysis (Manjón and Martínez 2014).

In the first group of regressions, which had as a dependent variable the opinion that the system needed fundamental changes, LAC countries, OECD countries and the combined group of LAC and OECD countries showed the same trends. The possibility of accessing care on the same day or the next was associated with a probability of thinking that the system needs fundamental changes 0.957 times lower in LAC (PR=0.957, CI: 0.926-

0.999), 0.924 times lower in the OECD countries (PR=0.924; CI: 0.886-0.963), and 0.937 lower in the complete sample (PR=0.937, CI: 0.909-0.965). Likewise, the availability of medical care with the characteristics of a patient-centered PHC was associated with a probability of the opinion that fundamental changes are needed 0.912 times lower in LAC (PR=0.912, CI: 0.861-0.965), 0.879 times lower in OECD countries (PR=0.879, CI: 0.841-0.920), and 0.879 lower in the full sample (PR=0.879, CI: 0.847-0.912). Alternatively, the presence of organizational barriers to accessing care outside of office hours was associated with a higher probability of stating that the system needs changes 1.071 times higher in LAC (PR=1.071, CI: 1.033-1.110), 1.215 times higher in OECD countries (PR=1.215, CI: 1.165-1.267) and 1.172 lower in LAC and OECD combined (PR=1.172, CI: 1.135-1.209).

At the same time, we identified other variables that were significant only in the OECD countries and in the group that combines both in a single model. The experience of financial barriers was associated with a higher probability of supporting the need for fundamental changes, 1.179 times higher in OECD countries (PR=1.179, CI: 1.127-1.234) and 1.109 times higher in the combined LAC and OECD group (PR=1.109; CI: 1.075-1.144). Positive interpersonal experience with the physician was associated with a lower probability of supporting fundamental changes 0.878 times lower in OECD countries (PR=0.878, CI: 0.841-0.918) and 0.914 times lower in LAC and OECD combined (PR=0.914; CI: 0.841-0.914). The sending of a reminder for check-ups was associated with a lower probability of saying that fundamental changes were required 0.949 lower

Table 9.3. Access and experience with primary health care in 17 countries from LAC and the OECD.

CHARACTERISTICS	BRAZIL (%)	COLOMBIA (%)	EL SALVADOR (%)	JAMAICA (%)	MEXICO (%)	PANAMA (%)	LAC (%)	GERMANY (%)	AUSTRALIA (%)	CANADA (%)	US (%)	FRANCE (%)	NETHERLANDS (%)	NORWAY (%)	NEW ZEALAND (%)	UK (%)	SWEDEN (%)	SWITZERLAND (%)	OECD (%)
Perception of the health system and perceived quality of care																			
Fundamental changes	96.8	80.1	89.1	87.3	79.8	91.2	87.4	55.1	50.7	57.6	73.2	60.4	48.1	53.4	53.4	36.3	55.4	46.6	55.4***
Very good quality of PHC	39.9	29.6	44.0	54.8	39.9	33.8	40.5	62.1	73.7	71.7	71.6	59.7	70.2	62.9	82.0	72.1	50.5	68.2	68.0***
Access, organizational and financial barriers																			
Access to PHC on the same day or the next	47.1	31.0	38.8	67.0	62.8	54.7	51.0	76.9	56.9	40.8	47.9	57.6	64.4	47.5	70.5	52.0	57.9	60.1	54.3***
Barriers to receiving care outside of office hours	65.3	46.4	76.6	51.7	64.9	69.9	62.1	27.0	40.1	55.1	51.4	45.3	34.1	33.9	37.6	27.9	39.4	36.2	44.2***
Financial barriers	26.3	24.8	47.3	46.0	32.8	25.4	34.7	11.8	13.6	11.7	35.0	18.4	23.1	10.1	21.7	3.8	5.1	17.1	15.3***
Experience with primary health care																			
Has patient-centered PHC	11.4	8.9	8.5	17.7	13.4	8.8	12.5	52.1	40.6	41.3	38.8	29.6	45.9	31.7	51.1	44.6	12.5	47.9	39.6***
Doctor explains the situation, spends enough time	38.0	64.2	50.4	52.8	68.0	45.0	55.7	86.1	76.6	74.7	76.2	74.6	78.0	74.6	84.0	81.7	72.2	74.7	76.5***
Prevention and basic early detection exams																			
PCP sent check-up reminder	24.3	27.4	36.8	22.1	26.3	32.1	28.2	44.6	34.5	36.6	43.7	29.9	51.5	22.4	55.7	46.0	29.2	23.6	38.1***
Checked blood pressure	63.8	65.7	70.4	83.5	77.9	79.5	73.8	83.6	62.2	77.8	87.3	87.2	66.6	65.7	70.2	63.9	61.4	60.0	73.0***
Checked cholesterol	85.9	59.6	48.4	63.2	80.0	45.7	64.3	77.6	76.3	69.2	74.7	70.0	69.1	55.3	70.0	68.1	45.6	76.6	68.8***

Note: the table presents weighted prevalence for the survey, adjusted for sex, age, level of education and self-reported health status. ***p<0.001 (LAC vs. OECD).

Table 9.4. Access and experience with primary health care by coverage type, averages of 6 LAC countries and 11 OECD countries.

CHARACTERISTICS	PUBLIC		SOCIAL SECURITY		PRIVATE		UNINSURED	
	LAC (%)	OECD (%)	LAC (%)	OECD (%)	LAC (%)	OECD (%)	LAC ^a (%)	OECD ^b (%)
Perception of the health system and perceived quality of care								
Fundamental changes	90.5	52.6***	85.2	54.3***	87.7	57.1***	85.6	76.7
Very good quality PHC	34.7	70.9***	34.2	61.2***	56.2	69.6***	49.5	63.4
Access, organizational and financial barriers								
Access to PHC on the same day or the next	47.0	48.9***	45.0	63.6***	64.3	54.4***	81.8	39.0***
Barriers to receiving care outside of office hours	66.5	43.1***	63.3	38.8***	54.7	46.4	62.3	57.2***
Financial barriers	41.5	15.9***	29.5	12.9***	32.5	14.7**	44.5	43.6
Experience with primary health care								
Has patient-centered PHC	7.2	39.5***	10.6	35.2***	22.9	42.5***	11.8	19.5*
Doctor explains the situation, spends enough time	42.3	74.3***	60.8	77.7***	63.2	77.4***	69.6	70.0
Prevention and basic early detection exams								
PCP sent check-up reminder	22.6	35.6***	31.4	35.7***	30.7	41.2***	20.2	19.5
Checked blood pressure	69.9	68.5***	74.4	71.0**	80.3	76.7*	52.2	78.7***
Checked cholesterol	65.5	68.6***	60.8	64.2***	68.8	71.9***	63.6	62.1

Note: the table presents average prevalence for each region, with sample weights from the survey applied and adjusted for sex, age, level of education and self-reported health status. ^a Only includes data from Mexico, the only LAC country with the option to respond as “uninsured.” ^b Only includes data from the United States, the only OECD country with the option to respond as “uninsured.” ***p<0.05, ** p<0.01, *** p<0.001 (LAC vs. OECD).

Table 9.5. Access and experience with primary health care by education level, averages of 6 LAC countries and 11 OECD countries.

CHARACTERISTICS	PRIMARY		SECONDARY		HIGHER ED.	
	LAC (%)	OECD (%)	LAC (%)	OECD (%)	LAC (%)	OECD (%)
Perception of the health system and perceived quality of care						
Fundamental changes	87.8	54.3***	87.4	55.8***	86.8	55.8***
Very good quality PHC	34.8	65.9***	39.1	67.8***	50.4	71.3***
Access, organizational and financial barriers						
Access to PHC on the same day or the next	44.7	51.8***	51.3	55.1**	56.1	54.9
Barriers to receiving care outside of office hours	65.5	42.8***	62.8	45.1***	57.8	43.2***
Financial barriers	38.1	19.6***	34.9	14.6***	31.2	13.1***
Experience with primary health care						
Has patient-centered PHC	8.7	40.5***	12.0	39.1***	19.0	39.9***
Doctor explains the situation, spends enough time	44.1	74.7***	57.2	76.2***	64.3	79.5***
Prevention and basic early detection exams						
PCP sent check-up reminder	28.3	40.0***	27.0	36.8***	31.3	39.5***
Checked blood pressure	68.2	69.9***	72.8	72.6***	82.0	78.3
Checked cholesterol	62.5	67.8***	64.2	68.2***	66.0	71.8***

Note: the table presents average prevalence for each region, with sample weights from the survey applied and adjusted for sex, age, level of education and self-reported health status. ***p<0.05, ** p<0.01, *** p<0.001 (LAC vs. OECD).

(PR=0.949, CI: 0.912-0.988) in OECD countries and 0.958 times lower in LAC and OECD combined (PR=0.958; CI: 0.929-0.987).

One variable was significant only in LAC and in the group that combines the two subgroups. Compliance with blood pressure checks was associated with a lower probability of requesting fundamental changes, 0.954 lower in LAC (PR=0.954, CI: 0.914-0.996) and 0.956 in LAC and OECD combined (PR=0.956; CI: 0.919-0.996). Cholesterol checks had no significant effect in either of the two groups of countries.

In the second group of regressions, with the dependent variable perception of a very good quality PHC, the trends and directions of association between the independent variables and the dependent variable were more uniform among the subgroups of countries, although for most of the variables, the magnitudes of the associations were higher in the LAC group. In the combined group of LAC and OECD countries, they were significantly associated with a greater probability of patients' perception of very good quality for the following variables: the possibility of accessing care the same day or the next, which was 1.348 times higher in LAC (PR=1.348, CI: 1.217-1.494), 1.076 times higher in OECD countries (PR=1.076, CI: 1.043-1.109) and 1.116 higher in LAC and OECD combined (PR=1.116, CI: 1.083-1.151); the availability of medical care with the characteristics of a patient-centered PHC, which was 1.457 times higher in LAC (PR=1.457, CI: 1.329-1.597), 1.264 times higher in OECD countries (PR=1.264, CI: 1.224-1.306) and 1.292 times higher in LAC and OECD combined (PR=1.292, CI: 1.253-1.333); a positive interpersonal experience between the patient and doctor, which was 1.488 times higher in LAC

(PR=1.488, CI: 1.332-1.662), 1.741 times higher in OECD countries (PR=1.741, CI: 1.601-1.796) and 1.696 times higher in LAC and OECD combined (PR=1.696, CI: 1.601-1.796); and the sending of reminders for check-ups, with a probability 1.123 times higher in LAC (PR=1.123, CI: 1.027-1.227), 1.067 times higher in OECD countries (PR=1.067, CI: 1.037-1.098) and 1.075 times higher in LAC and OECD combined (PR=1.075, CI: 1.045-1.106).

Furthermore, for both groups of countries, organizational and financial barriers were associated with a lower probability of patients perceiving very good quality. Organizational barriers to receiving care outside of office hours were associated with a probability of perceived quality 0.756 times lower in LAC (PR=0.756, CI: 0.691-0.827), 0.894 times lower in OECD countries (PR=0.894, CI: 0.867-0.922), and 0.866 times lower in LAC and OECD combined (PR=0.866, CI: 0.841-0.892). The variables that indicate hypertension monitoring in the last year or cholesterol checks in the last five years were not statistically significant in any of the groups of countries.

Discussion and policy implications

The publication of *Renewing Primary Health Care in the Americas* (PAHO 2007) sparked a debate and triggered important PHC reforms in the region. However, ten years later, the results of the comparison between LAC countries and the OECD show that, despite the advances in terms of designing new public policies and expanding their coverage, the road towards the consolidation of an effective PHC in the region is a long one.

Table 9.6. Determinants of the “need for fundamental changes to the health system” and “perception of very good quality of care with regard to the PHC,” Poisson multivariate regression models.

Dimension	Variable	Statistic	Health System Requires Fundamental Changes To			Perception of Very Good Quality with Regard		
			Function Better			To PHC		
			LAC	OECD	LAC + OECD	LAC	OECD	LAC + OECD
Access: organizational and financial barriers	Able to access care from a doctor or nurse the same day or the next	Coef.	0.957**	0.924***	0.937**	1.348***	1.076***	1.116***
		p	0.009	0.000	0.000	0.000	0.000	0.000
		IC	[0.926; 0.989]	[0.886; 0.963]	[0.909; 0.965]	[1.217; 1.494]	[1.043; 1.109]	[1.083; 1.151]
	Organizational barriers to receive care outside of office hours	Coef.	1.071***	1.215***	1.172***	0.756***	0.894***	0.866***
		p	0.000	0.000	0.000	0.000	0.000	0.000
		IC	[1.033; 1.110]	[1.165; 1.267]	[1.135; 1.209]	[0.691; 0.827]	[0.867; 0.922]	[0.841; 0.892]
	Financial barriers to accessing services and difficulty paying medical bills	Coef.	1.011	1.179***	1.109***	0.863**	0.934**	0.915***
		p	0.524	0.000	0.000	0.003	0.006	0.000
		IC	[0.977; 1.047]	[1.127; 1.234]	[1.075; 1.144]	[0.783; 0.952]	[0.889; 0.980]	[0.875; 0.957]
Experience with primary health care	Patient-centered PHC (regular place of care, familiarity with medical history, easy communication, coordination of care)	Coef.	0.912**	0.879***	0.879***	1.457***	1.264***	1.292***
		p	0.002	0.000	0.000	0.000	0.000	0.000
		IC	[0.861; 0.965]	[0.841; 0.920]	[0.847; 0.912]	[1.329; 1.597]	[1.224; 1.306]	[1.253; 1.333]
	Doctor explains the situation in a way that is easy to understand and spends enough time with the patient	Coef.	0.974	0.878***	0.914***	1.488***	1.741***	1.696***
		p	0.129	0.000	0.000	0.000	0.000	0.000
		IC	[0.942; 1.008]	[0.841; 0.918]	[0.886; 0.943]	[1.332; 1.662]	[1.628; 1.863]	[1.601; 1.796]
Prevention and basic early detection exams	Health center staff send reminder for check-up	Coef.	0.970	0.949*	0.958**	1.123*	1.067***	1.075***
		p	0.107	0.011	0.006	0.011	0.000	0.000
		IC	[0.934; 1.007]	[0.912; 0.988]	[0.929; 0.987]	[1.027; 1.227]	[1.037; 1.098]	[1.045; 1.106]
	Blood pressure was checked in the last year	Coef.	0.954*	0.962	0.956*	1.145	1.010	1.028
		p	0.030	0.181	0.030	0.055	0.680	0.238
		IC	[0.914; 0.996]	[0.910; 1.018]	[0.919; 0.996]	[0.997; 1.314]	[0.962; 1.061]	[0.982; 1.077]
	Cholesterol was checked in the last five years	Coef.	1.010	1.009	1.019	0.963	1.031	1.015
		p	0.613	0.736	0.326	0.483	0.183	0.492
		IC	[0.971; 1.050]	[0.957; 1.065]	[0.982; 1.057]	[0.867; 1.070]	[0.986; 1.078]	[0.973; 1.058]
Observations (n)			4,250	12,633	16,883	4,276	12,511	16,787
Pearson goodness-of-fit			594.348 ^a	5220.214 ^a	5794.183 ^a	2372.430 ^a	3667.934 ^a	6039.998 ^a

Table 9.6. | Note: Bolded results are prevalence rates obtained from robust Poisson regressions controlled for sex, age, education level, presence of chronic disease, subjective perception of health status, health coverage and fixed effects by country. LAC includes Brazil, Colombia, El Salvador, Jamaica, Mexico and Panama. ^aThe results of the Pearson goodness-of-fit test indicate that the Poisson model is appropriate (Prob>chi²=1.0000). *p<0.05, **p <0.01, ***p<0.001.

On the whole, the results of this comparative analysis show that there is still an important differential in perceived quality among the inhabitants of the LAC countries and OECD countries (in LAC, 40.5% of the respondents indicated very good quality, in contrast to 68.0% of respondents from OECD countries), and differences persist even when the data is stratified by type of coverage or level of education.

The satisfaction of people in Latin America and the Caribbean with their health systems is lower than that of citizens of high-income OECD countries (87.4% in LAC requested fundamental changes, compared to 55.4% in OECD). These differences can be explained by greater organizational and financial barriers that affect access, foster more frequent negative experiences in primary health care, and lead to lower levels of prevention and basic examinations of timely detection of diseases among the inhabitants of LAC countries. The discrepancies are evident even when controlled for by socioeconomic characteristics, such as sex, age, education, health status and type of coverage.

Although the main causes of hospitalization and death in LAC are chronic diseases and their numbers are increasing (Glassman *et al.* 2010), in comparison to OECD countries, a lower prevalence of NCDs that had been previously diagnosed by doctors was observed (37.1% versus 55.9%, respectively). This finding may suggest a better health status in LAC countries

than in OECD countries, but the following evidence indicates that chronic diseases are most likely underdiagnosed in LAC due to barriers in accessing services for detection and medical care.

First, the survey data indicate that poor self-perception of health status is higher in LAC than in OECD countries (19.1% vs. 14.8%, respectively). Second, despite the literature suggesting a positive association between poor self-perception of health status and the presence of chronic diseases (Chan *et al.* 2015; Theme Filha *et al.* 2015; Mavaddat *et al.* 2014), the correlation between diagnosed chronic diseases and poor perception of health status is weaker in LAC than in OECD countries. In LAC, 10.3% of those who indicated that they suffer from a chronic disease diagnosed reported having poor health, while in OECD countries that figure was only 4.2%. Third, it seems implausible that the effectiveness of health services in LAC for managing chronic diseases is so much greater than that observed in OECD countries so as to justify such a difference. In fact, although the levels of access reported by LAC patients were not as low as those of OECD countries (51.0% of LAC participants said they had access to PHC on the same day or the next vs. 54.3% OECD participants), the proportion of people who stated that they have access to services that meet the high standards of a patient-centered PHC, which are especially relevant to the treatment of chronic diseases (Sidorov *et al.* 2008), was much lower in LAC as compared to OECD countries (12.5% and 39.6%, respectively).

The analysis by type of coverage provides results that are difficult to interpret due to the multiplicity of existing modalities. In LAC, non-contributory public insurance (financed by general taxes) generally shows lower indicators than social security-type contributory insurance (financed by workers' payroll contributions). However, these results cannot be interpreted as an indication in favor of the contributory model. In Colombia, El Salvador, Mexico and Panama, public insurance is focused on the poorest populations, which typically face greater health risks and have lower levels of financing per capita (OECD 2016a; OECD 2016b; Acosta *et al.* 2011), whereas in Brazil and Jamaica there is no contributory social security model for health services. By comparison, one of the two models typically predominates in each of the OECD countries: non-contributory public insurance in Australia, Canada, New Zealand, and the United Kingdom; contributory social security in Germany, the Netherlands, France, Norway, Sweden, and Switzerland; and a more complex model in the United States. Due to these similarities among OECD countries, the experiences that their citizens reported with the PHC were similar, with slight differences in favor of public insurance on four variables (perception of the need for fundamental changes, very good quality of PHC, patient-centered PHC, and cholesterol checks), and in favor of social security on six variables (access to PHC the same day or the next, barriers to receiving care after office hours, financial barriers, the doctor explains the situation and spends enough time, reminder for check-ups, blood pressure check).

The populations with private insurance and those without insurance are two particular cases that require further analysis. In almost all the countries observed, private

insurance represents coverage that supplements public insurance or social security and is positively correlated with the socioeconomic level of the participants. Therefore, it would be expected that the results of the perceived quality of care, access, organizational and financial barriers, experience with PHC, and prevention and early detection exams would have smaller gradients between LAC and OECD countries when only the population with private insurance is considered, as opposed to if the populations were compared with public insurance or social security. However, it is noted that the differences that put LAC at a disadvantage against the OECD countries persist only when the group with private insurance is considered, with the exception of the variable access to PHC on the same day or the next (64.3% in LAC vs. 54.4% in OECD countries) and the variable blood pressure check (80.3% in LAC vs. 76.7% in OECD countries).

The uninsured population has even more particular characteristics. The United States and Mexico were countries in which some people in the sample said they did not have health insurance coverage. In the comparison between uninsured participants, the statistically significant difference disappears in five of the eleven variables in the LAC-OECD comparison (fundamental changes, very good quality of PHC, patient's interpersonal experience with the physician, check-up reminder and cholesterol check). Furthermore, access to PHC on the same day or the next is higher in LAC than in OECD countries (81.8% versus 39.0%), although access to patient-centered PHC is lower (11.8% compared to 19.5%), which still denotes lower quality of services in LAC.

The results of the multivariate analysis indicate that access to and experience

with the PHC are important determinants of users' perception of the health system and its quality. The trend is relatively uniform, be it in LAC, OECD countries or a sample that combines the two groups. In accordance with the conceptual framework proposed for the study, many of the theoretical characteristics of an effective PHC—especially access, first contact, coordination, longitudinality, user-centered care, the patient experience—are associated both with the view on the health system, as well as the perception of quality, which in turn has important implications for public policies. For example, some of the statistical associations of greatest importance to the perceived quality of care were the availability of patient-centered PHC (a regular place of care, easy communication during office hours, a health provider who is familiar with the patient's medical history and helps to coordinate his care) and the patient's interpersonal experience (doctors who explain the situation in a way that is easy to understand and who spend enough time with the patient). Nevertheless, the levels reported in LAC for these two dimensions were lower than those of the OECD countries and these elements of care must be an important part of the agenda to strengthen PHC in the region.

The findings of the study also reinforce the importance of listening to and incorporating

the opinions of patients in the process of formulating public health policies, as well as in initiatives for sector reforms and regular monitoring and evaluation efforts. For example, the study questionnaire can be incorporated into regular patient consultations, as a way to bring decision makers and managers closer to the services' end users, thereby strengthening a tool that allows for the iterative evaluation of the efficiency of efforts to continuously improve services. The comparison of results between LAC and OECD countries shows that, despite contextual differences between the two groups, there are similarities in the determinants of quality of care from the patient's perspective. It is of fundamental importance to identify the organizational elements of the health system to ensure ease of access to a regular place of care that serves as a gateway to services, that understands the needs of patients, and whose services are geared to those same needs.

The agenda for strengthening primary health care should be affirmed as the main focus to achieve the health system objectives that matter to LAC citizens. We hope that the results of this study will help decision makers, managers and academics—not only in Brazil, Colombia, El Salvador, Jamaica, Mexico and Panama, but throughout the LAC region—to transform their health systems and evolve towards user-centered care models.

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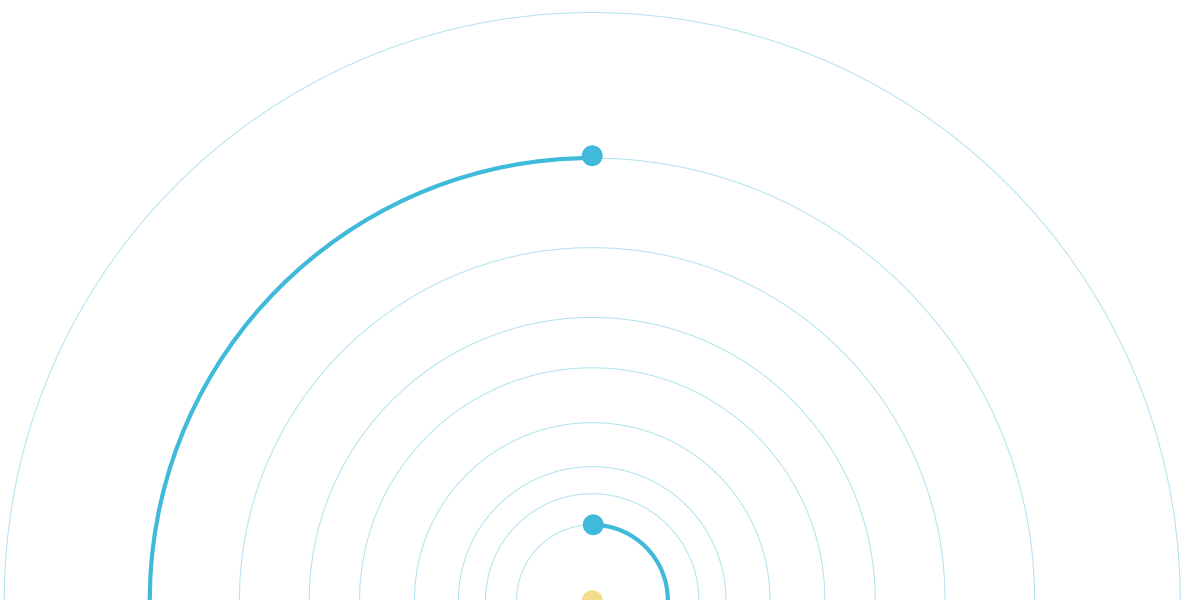
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