

DIRECTIONS IN DEVELOPMENT
Human Development

The Health Workforce in Latin America and the Caribbean

An Analysis of Colombia, Costa Rica, Jamaica, Panama, Peru, and Uruguay

Carmen Carpio and Natalia Santiago Bench

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Abbreviations

ACSC	Asociación Colombiana de Sociedades Científicas (Colombian Association of Scientific Societies)
ANEC	National Association of Nurses of Colombia
ARP (Colombia)	Administradoras de Riesgos Profesionales (Professional Risk Administrative Entities)
ASSE (Uruguay)	Administración de los Servicios de Salud del Estado (Administration of State Health Services)
CAPE	Caribbean Advanced Proficiency Examinations
CARICOM	Caribbean Community
CAS	Contrato Administrativo de Servicios (Administrative Contract of Services)
CASMU	Centro Asistencial del Sindicato Médico del Uruguay (Uruguay Medical Union Health Care Center)
CCSS	Caja Costarricense de Seguro Social (Costa Rican Social Security Fund)
CHASE	Culture, Health, Arts, Sports, and Education
CITHS (Colombia)	Comisión Intersectorial para el Talento Humano en Salud (Intersectoral Commission on Human Resources for Health)
CONACES (Colombia)	Comisión Nacional de Aseguramiento de la Calidad de la Educación Superior (National Commission for Quality Assurance in Higher Education)
CONAREME (Peru)	Comité Nacional de Residencia Médica (National Medical Residency Committee)
CONEAU (Peru)	Consejo de Evaluación, Acreditación y Certificación de la Calidad de la Educación Superior Universitaria (Council for the Evaluation, Accreditation, and Certification of the Quality Higher Education Programs)
CPU	capitation payment unit
CR	contributory regime

CSEC	Caribbean Secondary Education Certification
CSME	CARICOM Single Market Economy
CSS (Panama)	Caja de Seguro Social (Social Security Fund)
DGGDRRHH (Peru)	Dirección General de Gestión del Desarrollo de Recursos Humanos (General Directorate for the Management of Human Resources Development)
DHS	Demographic Health Surveys
EBAIS	Equipo Básico de Atención Integrada de Salud (Basic Health Team for Integrated Health Care)
EEC (Panama)	Estrategia de Extensión de Cobertura (Extension Coverage Strategy)
ELITES (Peru)	mobile brigades
EPS (Colombia)	Empresas Promotoras de Salud (Health Promotion Companies)
FEMI (Uruguay)	Federación Médica del Interior (Medical Federation of the Interior)
FONASA	Fondo Nacional de Salud (National Health Fund)
FONCODES	Fondo de Compensación Social y Desarrollo (Social Compensation and Development Fund)
FOSYGA (Colombia)	Solidarity and Guarantee Fund
HO-LAC	Health Observatories-LAC
HRH	human resources for health
HRIS	human resource information system
IAMC	Instituciones de Atención Médica Colectiva (Collective Medical Care Institutions)
ICGES	Instituto Conmemorativo Gorgas de Estudios de Salud (Gorgas Memorial Institute for Health Studies)
ICONTEC	Instituto Colombiano de Normas Técnicas y Certificación (Colombian Institute of Technical Standards)
IMAE (Uruguay)	Institutos de Medicina Altamente Especializados (Highly Specialized Medical Institutes)
LAC	Latin America and the Caribbean
MDG	Millennium Development Goals
MOH	Ministry of Health
NAJ	Nurses Association of Jamaica
NCDs	noncommunicable diseases
NHF	National Health Fund
OOP	out of pocket
P4P	pay for performance

PAHO	Pan American Health Organization
PBF	performance-based financing
PHC	primary health care
RHA	Regional Health Authority
RN	registered nurse
SAQ	Mesa de Sociedades Anestésico-Quirúrgicas (Round Table of Anesthetic and Surgical Societies)
SERUMS (Peru)	Servicio Rural y Urbano Marginal de Salud (Rural and Urban-Marginal Health Services)
SINAES (Costa Rica)	Sistema Nacional de Acreditación de la Educación Superior (National Accreditation System for Higher Education)
SIS (Peru)	Seguro Integral de Salud
SMU	Sindicato Médico del Uruguay (Uruguay Medical Union)
SNP	Servicios No Personales (Nonpersonal Services)
SOGC (Colombia)	Sistema Obligatorio de Garantía de Calidad (Mandatory Quality Assurance System)
SR	subsidized regime
SSO	Servicio Social Obligatorio (Mandatory Social Service)
UCR	Universidad de Costa Rica (University of Costa Rica)
UHC	universal health coverage
WHO	World Health Organization

Executive Summary

This study intends to provide an update of the status of the human resources for health (HRH) subsystem in six countries of Latin America and the Caribbean (LAC)—Colombia, Costa Rica, Jamaica, Panama, Peru, and Uruguay. The study's discussion centers around five questions: how the health workforce is financed, how it is organized, how it is managed, how it is regulated, and how it performs. Further, the study strives to understand what role, if any, performance management policies and incentives play in these countries' HRH subsystems. Performance management here is broadly understood to comprise not only the rules and practices dealing with appraisal, rewards and sanctions, learning and development, supervision and support, promotion, and certification and re-certification, but also the contractual arrangements and compensation of the health workforce.

There is limited evidence linking HRH performance management techniques to health outcomes, because outcomes are the result of HRH actions acting in conjunction with other initiatives. A literature review conducted as part of this study found that, even though there is a large body of work examining performance management and incentives from a global angle, far less research in this regard has been conducted in LAC. The literature review found few articles dealing with research on performance management and incentives with an exclusive Latin American focus, and none with an exclusive Caribbean focus. In addition, no studies were found that specifically linked performance management techniques in the field of HRH to performance measures. Although HRH actions can play a role and may provide supporting evidence on health outcomes, HRH is neither the sole focus nor the sole input. Consequently, it cannot be claimed that performance results exclusively from performance management techniques and incentives introduced in the area of HRH.

HRH in the six studied countries are hired through various contracting mechanisms. While some of these have begun to introduce ways to reward performance, instability and a lack of clear criteria in contracting remains. The contracting approaches seen across the region include salaried (permanent), temporary (part-time, short-term contracts), fee-based, and performance-based schemes. Colombia and Costa Rica, for example, rely on schemes that reward performance, such as capitation-payments based on the quantity of services provided in Colombia and payments based on the achievement of performance

targets in Costa Rica. In Jamaica and Peru, more than 30 percent of the health workforce is hired through temporary contracts, which leads to workforce instability. Moreover, national-level planning must address a lack of clear criteria on the type of contracting mechanism in Panama and a wide range of salaries and benefits available to health professionals in Peru. And in Uruguay, contracting practices show that in the private sector, health workers are given a say in determining their employment conditions, whereas in the public sector, the state and unions make these decisions.

The salary levels offered to health providers vary significantly across countries. For example, salary levels for health professionals in both Colombia and Costa Rica are attractive when compared to salaries in other sectors, especially since health professionals are able to obtain more specialized degrees, as is the case in Colombia. In Jamaica and Peru, salary levels are lower for health professionals working at the primary care level than for those working in the secondary level of care. Panama and Uruguay have clear salary scales: in the former, they are harmonized for both the Ministry of Health (MOH) and Social Security; in the latter, they are specified for each specialization category.

All six focus countries use financial incentives, on top of health workers' salaries, toward various ends. Colombia, Costa Rica, Jamaica, Panama, and Peru have introduced financial incentives to encourage work in rural, remote areas. Costa Rica, Jamaica, and Panama all provide financial incentives to health workers: in Costa Rica's case, they have led to salary increases and bonuses significantly above those of other categories of professionals; in Uruguay, financial incentives to health workers are mainly intended to align salary levels of the public and private sectors.

All countries under study also have made progress in addressing the skill-mix imbalance of HRH by achieving targets on density and HRH ratios and strengthening primary health care (PHC) presence. All, except Peru, have achieved the World Health Organization's (WHO) HRH density target of 25 health professionals per 10,000 population. And in Colombia, the country's workforce is made up of at least 40 percent of PHC physicians. Jamaica still struggles to bring up its PHC levels, because lower salaries at the PHC level represent an obstacle. Costa Rica and Jamaica have made the most progress toward establishing a PHC team with a wide range of skills to improve access for vulnerable groups. Panama and Peru, conversely, despite a PHC focus being articulated as a model of care (Panama) and through mobile brigades (Peru), show a lack of PHC focus on the ground. Colombia, Costa Rica, Jamaica, and Peru have all achieved the minimum 1:1 nurse-to-physician ratio. Last, all six of the focus countries in this study have achieved the goal of establishing an HRH planning unit to help strategically address issues related to skill-mix imbalance.

Even though the LAC region has made education in health more accessible and strengthened the PHC focus of training institutions, there is a limited absorption capacity for graduates. Despite the fact that all focus countries have acknowledged the need to strengthen the PHC focus, only Uruguay has 80 percent of its health sciences schools reorienting their education toward PHC.

The focus countries are making education in health more accessible to the population by increasing either the number of specialties (Uruguay) or the number of training institutions offering health programs (Colombia, Peru) or by facilitating the application and placement upon graduation (Jamaica). However, the capacity to absorb graduates who complete health training programs is limited. High salary levels for health professionals have helped Costa Rica to achieve an attrition rate of 20 percent, and the disparity in compensation between the first and second levels of care in Jamaica has contributed to high levels of attrition in that country. In Panama and Uruguay, 70 percent of health sciences and public health schools are being accredited; in Peru, the accreditation process has just begun; and voluntary accreditation programs exist in Colombia, Costa Rica, and Jamaica.

The gap in the distribution of health workers in LAC is being addressed through strategies that encourage rural service, increased training emphasizing local community knowledge, and the hiring of health workers in their own communities. With the exception of Jamaica, all focus countries have introduced programs to encourage rural or remote service, but only Peru has seen positive results, with an increase in the number of health professionals working in remote areas in the past two years. Colombia and Panama have programs in place that are helping them progress toward ensuring that health workers have public health and comparable intercultural competencies, while in Peru, a review of health competencies shows a lack of priority assigned to community-level care. Panama has made an effort to upgrade the skills of nurses, auxiliary nurses, and health technicians, but in Costa Rica and Jamaica, nurses still confront barriers to accessing further training opportunities. Costa Rica and Uruguay recruit at least 30 percent of health care workers in primary health care settings from their own communities; in Colombia, only residents of certain remote areas are allowed to be hired in those communities; and in Panama, the hiring of remote-area residents is given priority.

The migration of health personnel also has created pressures on the region's HRH, and the six focus countries have put in place self-sufficiency policies and other mechanisms to cope with this issue. On the one hand, the numbers of foreign-trained health workers is on the rise: Colombia, for example, has seen an influx of health professionals from the República Bolivariana de Venezuela and Cuba; Costa Rica, Jamaica, and Panama have brought in foreign health professionals to help address shortages on a temporary basis. In addition, the region is also experiencing a drain of health professionals, with Peru accounting for 44.7 percent of all health-personnel outmigration in the region. In both Jamaica and Peru, too, there is a high intention to migrate among health professionals. The lack of promotion plans, limited nonmonetary incentives, and the shortage of personnel for recruitment and eventual placement are challenges faced across the focus countries. Colombia, Costa Rica, Peru, and Uruguay have all developed mechanisms for certifying foreign-trained professionals through degree validation and facilitating formal hiring processes, which are helping countries fill the gaps in health worker presence in rural, remote areas. As member states of the WHO,

all six focus countries have voluntarily adopted WHO's Global Code of Practice on the International Recruitment of Health Personnel.

LAC countries have acknowledged the importance of promoting safe and health working conditions and reducing precarious employment; to that end, they have introduced HRH safety policies and enacted legislation to regulate disputes and negotiations. The six focus countries have committed themselves to reduce by half the proportion of precarious, unprotected employment of health service providers. However, challenges remain: Costa Rica and Uruguay face the issue of underemployment, and the proportion of PHC workers who are precariously employed is 19 percent in Jamaica and 32 percent in Peru. In addition, all six countries are developing health worker safety policies and programs to reduce occupational diseases and working accidents. Colombia is designing risk programs for work-related illnesses and accidents, Costa Rica and Jamaica are targeting health worker safety, and Peru is developing guidelines and measures to provide health workers with satisfactory working conditions. In Peru and Uruguay, 60 percent of managers of health services meet competency requirements, and in Panama and Peru, certification processes are being implemented or improved to strengthen the quality and uniformity of training for health professionals. All countries have put in place some mechanism to mitigate or resolve disputes. Colombia and Jamaica both have legislation in effect to regulate provider conduct, guide professional practice, and apply sanctions; Uruguay and Jamaica involve multiple actors in key negotiations. The experience of professional associations in Panama and Colombia reflects the important role these entities play in policy decisions and dialogue with the government, whereas the recent experience of unions reflects their limited ability to act because of fragmentation and division.

The health workforce is the most significant input in a health care system. Its performance directly affects the health system's overall quality, as well as its outcomes. In reviewing the performance of the HRH subsystem across key HRH issues, the six focus countries show uneven results; for example:

- The countries' performance on the access to or availability of health workers is mixed. On the one hand, HRH density and nurse-to-doctor ratios in LAC largely surpass the regional targets, which indicates that the minimum number of professionals is available. Notwithstanding, programs that promote a PHC focus, the availability of health professionals in rural areas, and self-sufficiency policies to mitigate the loss of health professionals need to be strengthened. Moreover, long wait times and high rates of absenteeism in Costa Rica and Jamaica result in client dissatisfaction.
- In terms of quality of care, results also are mixed. In Costa Rica, there is general dissatisfaction with management services in the health sector, and in Panama, no protocols are in place to improve care processes. On the other hand, Colombia has created the Mandatory Quality Assurance System (SOGC) to maintain and improve the quality of health services, and customer satisfaction is a priority for the government of Jamaica. To ensure the quality of their

health training programs, many countries in LAC are implementing accreditation programs as a voluntary process, and certification programs of health professionals in the region range from being nonexistent to mandatory.

- In the area of professional practice, dual practice is common in LAC, although discouraging factors faced by health workers can offset its benefits. Dual practice allows health professionals to work in both the public and private sectors and so increase their earnings, but long clinical and administrative hours have begun to act as discouraging factors.
- Incentives (monetary and non-monetary) offered to health professionals as part of the professional practice environment in the six focus countries were not found to be linked to performance.

In light of these results, this study provides an in-depth review of the status of the HRH subsystem in the six Latin America and Caribbean countries studied, focusing on the financing, organization, management, regulation, and performance of the health workforce.

Introduction

Overview

The World Health Organization (WHO) defines human resources for health (HRH) as “all people engaged in actions whose primary intent is to enhance health.” HRH, or the health care workforce, includes those involved in the direct delivery of health services—such as physicians, nurses, midwives, dentists, community health workers, and social health workers—as well as those who, while not directly delivering services, are essential to the functioning of the health system, such as health service managers, health information technicians, and health economists.

In most countries, HRH represent the largest portion of the health care budget and deal with a broad range of issues. According to the Global Health Workforce Alliance, HRH constitute the largest single cost element in providing health services in low- and middle-income countries. Countries must also deal with a broad range of financial issues, such as finding the financial resources and appropriate payment methods to ensure an adequate supply and mix of health workers and to stimulate productivity, responsiveness, and the provision of effective care.¹ HRH issues also relate to planning, development, management, retention, and performance. Considering the sizeable investment being made globally in HRH, it is critical to better understand the role of policies and incentives behind the performance of the health workforce, which directly impacts the delivery of health services and, in turn, the health outcomes achieved.

The Latin America and Caribbean region (LAC) has been characterized by HRH imbalances in terms of shortages, composition, and distribution (Kurowski and Garret 2004). In addition, personnel shortages vary greatly from country to country in this region. For instance, while Cuba and Puerto Rico have 66 doctors per 10,000 population, Honduras has only 3. Similarly, while many Eastern Caribbean countries have more than 40 professional nurses per 10,000 population, most of the region’s Spanish-speaking countries have less than 10 professional nurses per 10,000. Latin America and the Caribbean may not have the critical health-personnel shortages that some countries in Africa suffer, but this region does have important shortages.

There are also wide inequalities within the region's countries in terms of the geographical distribution of health personnel and in their distribution across levels of care (Kurowski and Garret 2004). Nationwide, Chile has close to 30,000 doctors, equivalent to 1 doctor per 533 people. However, Santiago's metropolitan area has 1 doctor per 385 population, while the regions of Libertador General Bernardo O'Higgins and Maule have only 1 doctor per more than 1,000 population (Guillou 2010).

There are also large skill-mix imbalances in Latin America and the Caribbean. For instance, while Grenada has 6 nurses per doctor, the Dominican Republic only has 0.2. Most nurses in LAC are auxiliary nurses, not professional, working mainly in hospital settings in urban areas (Malvarez 2005). Moreover, the majority of physicians in some countries are specialists, with very few general practitioners available.

In contrast to data on the numbers, distribution, and composition of health personnel, there is not much systematized information on the productivity, presence, and quality of the workforce. This paucity of information is mainly due to the region's weaknesses in human resource management information systems. What little information is available points to widespread problems; health workers spend much of their time in unproductive activities, are often absent from their positions, and are frequently on strike (Rowe and others 2009).

The workforce in LAC also shows low productivity. Although some middle-income countries in the region collect such information, not much is publicly available. However, evidence from a comparative study between contracted public health care facilities and traditional ones in Honduras showed large differences in productivity between health facilities. While "alternative" health care facilities provided 2.5 services per hour, "traditional" ones only provided 1.5 (García-Prado and Lao Peña 2010).

Unjustified absenteeism of health care personnel also has been reported as an important performance weakness in the region. A study on corruption in public hospitals in Argentina, Bolivia, Colombia, Costa Rica, Nicaragua, Peru, and República Bolivariana de Venezuela found that absenteeism among nurses and doctors is common in all these countries, particularly in Argentina, Colombia, Costa Rica, and República Bolivariana de Venezuela (Di Tella and Savedoff 2002). This study, based on interviews with doctors and nurses, found other illicit practices in these hospitals, such as theft of medical supplies; under-the-table payments for services; overpricing of drugs, medical supplies, and contracted services; unauthorized use of public services for private practice; and unjustified referral of patients to private providers.

Most of the available information on workforce-service quality comes from limited studies or from patient satisfaction surveys. However, while patient satisfaction is a goal of the health system, it does not measure the technical quality of services. There is some standard information available regarding the quality of antenatal care services in the region from Demographic and Health Surveys (DHS). In the Dominican Republic, data from a 2007 DHS reflects adherence to antenatal care protocols in some of its components, such as weight (99 percent),

blood pressure (99.5 percent), iron supplementation (92.8), urine test (97.2), and blood test (99.1). Despite this generally strong adherence to these protocols, and the country's high institutional birth coverage, maternal mortality is relatively high in the country. A study of the quality of institutional delivery in the country shows very poor quality of care in terms of overmedication of uncomplicated deliveries, improper management of complicated deliveries, and untimely management of emergencies. There is also evidence from 12 countries in the region that have C-section rates higher than 15 percent—the accepted medically justified rate—and seven countries with rates lower than 15 percent (Belizán and others 1999).

Health worker distribution also must consider that noncommunicable diseases (NCDs) account for the largest share of the disease burden. Although maternal and child health remains important, it is NCDs that represent the largest share of the region's disease burden and where HRH needs to be directed. Information on the quality of care of chronic diseases, in terms of both prevention and control, is difficult to find. However, this quality is expected to be lower for both, given the challenge that chronic disease prevention and control at the clinical level represent for the health workforce. For instance, the control of chronic diseases requires extended and continuous contact with the health sector, as well as the coordination of a health team with different skills, and early detection requires close contact with primary health care providers.

Objective and Scope

This study intends to provide a status update on the HRH subsystem in six countries of Latin America and the Caribbean—Colombia, Costa Rica, Jamaica, Panama, Peru, and Uruguay. The study aims to understand how the HRH subsystem is performing in these six focus countries and what role, if any, performance management policies and incentives play.

Specifically, this study aims to answer the following questions:

- How is the health workforce financed?
- How is the health workforce organized?
- How is the health workforce managed?
- How is the health workforce regulated?
- How well is the health workforce performing?

Methodology

The World Bank commissioned the Harvard School of Public Health to develop a tool to guide the information to be collected on performance management policies for physicians and professional nurses in the course of this study. The tool compiles, systematizes, and assesses policies and practices in a prompt and economical manner through expert interviews and desk reviews of existing information. The tool collected information on policies and on these policies'

actual implementation, as there can be vast discrepancies between what a policy says and what is put in practice. The tool's design was framed by literature reviews on the theory and evidence of what works and what does not, under what circumstances, and what is known about the effect of any particular HRH policy. Given the region's health systems' high degree of fragmentation and the large number of health care personnel involved, the tool focused on physicians and professional nurses.

The tool was applied in four countries—Colombia, Costa Rica, Jamaica, and Uruguay. It also was used as a reference for an HRH study conducted in Panama that focused on the urban versus rural distribution of the health workforce in that country. Although the tool was not directly applied in Peru, an analysis (draft) of that country's health labor market that provided information on some of the key collection fields from the tool was used there instead. The four countries where the tool was applied were selected based on their interest in applying the tool and generating a country case study. The four country case studies, plus the other two countries where the tool was referenced, also represent different subregions, which include the Andean (Colombia and Peru), Caribbean (Jamaica), Central American (Costa Rica and Panama), and Southern Cone (Uruguay) subregions.

A quick literature review, commissioned through the World Bank's Library Services Desk, was conducted to generate an overview of ongoing work in the area of performance management policies in LAC. The review looked for publications using the key words “performance management,” “performance incentives,” “dual practice,” “absenteeism,” and “pay for performance,” in combination with “health workforce” or “human resources for health.” Databases searched included the National Library of Medicine Gateway from the NIH, PubMed, Lancet, the WB/IMF Jolis Catalog, Human Resources for Health online, and BioMed Central. The search looked for thematically relevant articles from LAC, particularly from those countries included in this study (Colombia, Costa Rica, Jamaica, Panama, Peru, and Uruguay). Most articles reviewed fell in the 2005–14 time frame. In terms of overall distribution, the articles typically presented results from detailed literature reviews, multicountry studies, and findings from work specifically in Africa relevant to the HRH themes.

A regional report was produced, underpinned by the literature review that identified existing work related to performance management policies in the region. The country case studies and the two HRH country reports developed for Panama and Peru were the basis for the analysis of information collected.

The proposed work faced three main obstacles. First, information on health worker performance is difficult to find. Most information systems in the countries do not usually collect such data and, given the resources at hand, it was not possible to do a primary data collection effort for this study. That said, many middle-income countries in the region do collect information on productivity. Second, it was difficult to assess policies based on existing literature, in that it is not always possible to know what works, what does not work, and under what circumstances. Based on what is known, however, it was possible to make some

associations and identify knowledge gaps. Third, a local consultant or local consultant team was contracted to apply the tool and collect the data from it in the consultant's home country, which led to variations in how the tool was applied and the depth of information collected across countries.

Framework for Analysis

The rapid literature review found a large body of work on performance management and incentives, reported on from a global perspective. In contrast, there is far less research conducted about those HRH issues in the LAC region. The search also produced far fewer articles that focused exclusively on Latin America, and none that dealt exclusively with the Caribbean. Of the 56 articles and some stand-alone publications reviewed, *only eight articles focused exclusively on Latin America*: two articles discussed performance management and dual practice in Peru, one examined absenteeism in Costa Rica, another was an article on Chile's rural practitioner program that appeared in the *Bulletin of the World Health Organization*, and one was a WHO study on lessons learned on health worker salaries and benefits in Bolivia, Chile, and Peru.

This raises the possibility that, while it is likely that there is a critical mass of work in the area of performance management and incentives in LAC, there seems to be a certain degree of undercapture of this work in leading scientific journals in English. Alternatively, it is possible that not enough research or active publication was ongoing in these areas in LAC, since, if the contrary were true, the literature search, using reputable online databases, would have identified relevant articles in far greater numbers. Of course, testing conclusively which of these hypotheses is more robust could form the basis for a detailed stand-alone study. Such a study would draw upon a much more exhaustive and in-depth literature review of articles that not only covered a longer period but tapped many more articles from multilingual databases, having both far greater access to and coverage of Portuguese and Spanish publications.

Table I.1 shows the frequency distribution of the occurrence of the key search themes in the articles and other relevant publications reviewed. Scores were assigned when one or more keywords occurred in or were relevant to an article title or to the overall objectives of the study it described.

Current literature shows that the effects of *performance-based funding (PBF)* or *pay for performance (P4P)* depend on the interaction of several variables, including the design of the intervention (for example, who receives payments, the magnitude of the incentives, the targets, and how they are measured); the amount of additional funding; other components, such as technical support; and contextual factors, including the organizational environment in which the intervention is implemented. It is also important to consider the choice of contracted outcomes, the level at which incentives are provided, the structure of incentive contracts, and unintended consequences of the P4P approach. Although evidence indicates that P4P does improve health care quality, there is little or no evidence evaluating its effect on health care costs.

Table I.1 Frequency Distribution for One or More Key HRH Search Themes Addressed in Reviewed Articles

<i>Key themes in articles</i>	<i>Latin America</i>	<i>Caribbean</i>	<i>Other/worldwide (including multicountry studies)</i>
Financial incentives	1	0	15
Nonfinancial incentives	1	0	4
Motivation	0	0	5
Dual practice	1	0	1
Absenteeism	1	0	0
Pay for performance	0	0	11
Performance-based financing	0	0	7
Attraction and retention	1	0	9
Underserved rural areas	1	0	8
HRH management	1	0	6
Health worker performance	3	0	5
Performance management/metrics	3	0	7

Note: HRH = human resources for health.

Studies on the topic of *attracting and retaining health workers*, especially to and in rural areas, seem to indicate that there are no set answers to this challenge. A coherent combination of financial, educational, and management incentives, as well as nonfinancial incentives, is critical for a successful strategy designed to attract and retain health workers.

The important topic of *wages and incentives* gathers relevance and complexity as countries seek to attain universal health coverage (UHC), with a greater share of gross domestic product theoretically being allocated to health worker remuneration. This is belied by the seemingly declining fraction of health expenditure that goes toward paying health workers, because the pursuit of UHC calls for focusing on the health system as a whole. Overall, the implementation of financial incentives merits careful planning and management, in order to avoid loss of morale and staff grievances.

The role of *nonfinancial incentives* should not be underestimated. Studies show that incentives such as providing study leave, training, support, and supervisor feedback go a long way in motivating and retaining staff.

Assessing *job performance* requires a review of its measurement and metrics. A Latin American study on assessing district health managers found that factors associated with good manager performance included a favorable organizational structure (including written job descriptions and support from senior management), having decision power (including the ability to select and appoint new staff), and a good knowledge of operational realities on the ground.

Regarding *metrics*, the Health Observatory for Latin America and the Caribbean (HO-LAC) is working on the design and implementation of metrics for HRH. Under this HO-LAC initiative, researchers from nine countries in the region have formed the Collaborative Community on Human Resources for

Health in LAC (known as COCORHS for its Spanish acronym) to identify common metrics applicable to the field of HRH. Similarly, a study from Uganda on the successful transition from a static, paper-based system to a dynamic human resource information system (HRIS) demonstrates the pivotal role that metrics play in strategic health workforce planning.

In terms of the *dual practice* seen in many settings, studies conclude, realistically, that there is no single recipe to address the pervasiveness of such a practice. A study from Peru surveyed over 1,000 physicians working in that country's public and private sectors. The study concluded that dual practice worked to supplement low public-sector salaries in an environment characterized by an oversupply of doctors due to the deregulation of medical practice and education. However, the acknowledgment by the government that dual practice is a problem that requires regulation was critical to creating the circumstances that allowed for the acceptance of measures installed to improve the situation. Another study on salaries and benefits from Bolivia, Chile, and Peru noted that, although the public sector was the largest employer, better conditions in the private sector have affected retention, thereby basically implicitly endorsing dual practice.

Another key factor is the *motivation* of health workers, which goes to show that financial incentives, in and of themselves, are not enough. A study from Latin America examining the effect of decentralization and privatization reforms on the health workforce found that, without a motivated workforce, all other efforts to bring about changes could be counterproductive, suggesting that policy makers and administrators need to identify strategies that foster collaboration, inner motivation, and work ethics. Other studies show that the main motivators for health workers, next to salary, were related to responsibility, training, and recognition. Clearly, while motivational factors are undoubtedly country specific, financial incentives, career development, and management issues are core factors.

Considering the literature review, it is worth noting that, on the policy front, there is unequivocal political support for ramping up work on HRH in LAC. One such example is the recent call to action document from the 3rd Global Forum on HRH, held in Brazil in November 2013. This declaration endorsed the adoption of appropriate management approaches and incentives to enhance performance and maintain HRH quality through appropriate accreditation and continuous professional development opportunities.

In addition, tools are in place in the region to help countries move toward strengthening the health workforce. The five HRH challenge areas and accompanying goals identified by the Pan American Health Organization (PAHO) Regional Observatory on Human Resources for Health focus on achieving agreed targets across countries. These targets include developing mechanisms to improve the recruitment and retention of health professionals and providing the workforce with effective management and compensation systems so as to foster commitment and productive performance. Similar messages on improving performance and incentive mechanisms are echoed in the policy document

“Road Map for Strengthening the Caribbean Workforce, 2012–2017” (PAHO 2012), which advocates for improvement of health worker motivation and quality of service delivery under the area of human resource management.

Note

1. For additional information on this issue, visit the Alliance’s site at: <http://www.who.int/workforcealliance/about/taskforces/financing/en/index.htm>.

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CHAPTER 1

The Global Health Workforce

According to the World Health Organization's (WHO) *World Health Report 2006: Working Together for Health*, a density of 22.8 midwives, nurses, and physicians per 10,000 population was estimated to be the minimum threshold needed to achieve high coverage for essential health interventions in countries most in need. This threshold was applied to the best available data from 193 countries to estimate health workforce requirements to achieve an 80 percent coverage for deliveries by skilled birth attendants. The results of this analysis calculated a global shortage of 2.4 million midwives, nurses, and physicians in 57 countries that fell below this rate (WHO 2006).

Most of the countries that fell below the thresholds for density of skilled health professionals and coverage of births attended by skilled birth attendants are in Africa and Southeast Asia. A total of 70 percent of the countries with a density of skilled health professionals under 22.8 per 10,000 population and a coverage of births by skilled birth attendants below 80 percent are in Africa (31 countries, 57 percent) and in Southeast Asia (7 countries, 13 percent). Although the number of countries in Southeast Asia that fall below the determined density threshold and skilled birth attendant coverage is small, they are some of the most populous countries in that region, based on 2012 estimates—Bangladesh (154.7 million), India (1.2 billion), Indonesia (246.9 million), and Myanmar (52.8 million). In contrast, 48 percent of the countries with a density below 22.8 per 10,000 but with a skilled birth attendant coverage exceeding 80 percent are in the Americas (Campbell and others 2013).

Today, the average worldwide human resources for health (HRH) density is above the threshold, at 42.9 health workers (physicians and nurses) per 10,000 population. Of these, 13.9 are physicians and 29 are nurses. Other professional HRH groups included are dentists, averaging 2.6 per 10,000; pharmacists, averaging 4.4 per; and community health workers, ranging from <0.05 to 13.8.

Only two regions surpass the international HRH average density of 42.9 per 10,000 population—Europe, at 117.5, and the Americas, at 91.9. The two regions with the lowest HRH density are Africa, with 11.6, and Southeast Asia Region, with 15.4. The Eastern Mediterranean Region and the

Western Pacific Region also fall below the global HRH density rate and below that of Europe and the Americas (table 1.1).

Every region shows a greater density of nurses and midwives than physicians. Africa and the Americas have the widest density gap between nursing and midwifery personnel and physicians among all regions. Africa has 3.64 times as many nurses and midwifery personnel as physicians and the Americas have 3.50 times as many. The Western Pacific has the narrowest gap, with 1.28 as many nurses and midwifery personnel as physicians (table 1.1).

Worldwide, HRH density is higher in countries in the high-income group, compared to the low-income group (table 1.2). The physician density rises from lower- to higher-income groups, with the low-income group having 5.1 physicians compared to 27.1 in the high-income group. In terms of nursing and midwifery personnel, the low-income group has 14.9, compared to 72.4 in the high-income group. In both groups—physicians and nursing midwifery personnel—the figures are about five times as high in the high-income group than in the low-income group. This HRH density gap is most pronounced among pharmacists, where 9 times as many pharmacists are in the high-income group, compared to the low-income group.

Table 1.1 Health Workforce Density per 10,000 Population, by Region, 2005–12

	Physicians	Nursing and midwifery personnel	HRH density per 10,000 population	Dentists	Pharmacists	Community health workers
Worldwide average	13.9	29	42.9	2.6	4.4	—
African Region	2.5	9.1	11.6	0.4	0.6	—
Region of the Americas	20.4	71.5	91.9		6.9	—
Southeast Asia Region	5.5	9.9	15.4	0.7	4.2	0.8
European Region	33.3	84.2	117.5	5	6	—
Eastern Mediterranean Region	10.8	15.9	26.7	1.9	5.2	—
Western Pacific Region	15.2	19.5	34.7		4.4	7.9

Source: WHO 2013.

Note: HRH = human resources for health. — = not available.

Table 1.2 Health Workforce Density per 10,000 Population, by Income Group, 2005–12

Income group	Physicians	Nursing and midwifery personnel	HRH density per 10,000 population	Dentists	Pharmacists	Community health workers
Low income	5.1	14.9	20	1.2	1.2	—
Lower middle income	7.8	13.4	21.2	0.9	4.4	0.6
Upper middle income	17.8	35.4	53.2		3.6	—
High income	27.1	72.4	99.5	5.9	10.8	—

Source: WHO 2013.

Note: HRH = human resources for health. — = not available.

The shortage of health workers is compounded by the uneven distribution of HRH across urban and rural areas. Half of the world's population currently lives in rural and hard-to-reach areas, but most health workers live and work in cities. Almost all countries share this imbalance, which poses a major challenge to their provision of health services nationwide. Its impact, however, is most severe in low-income countries: on the one hand, many of these countries already suffer from acute shortages of health workers in all areas; on the other hand, the proportion of the population living in rural regions tends to be greater in poorer countries than in rich ones.

The urban/rural imbalance problem affects almost all countries worldwide. Although 50 percent of the global population lives in rural areas, rural areas are served by only 38 percent of the total nursing workforce and by less than 25 percent of the total physician workforce (WHO 2006). The situation is especially dire in 57 countries, where the critical shortage of trained health workers means that an estimated one billion people have no access to essential health care services. In Bangladesh, for example, 30 percent of nurses are located in four metropolitan districts where only 15 percent of the population lives (Zurn and others 2004). In South Africa, 46 percent of the population lives in rural areas, but only 12 percent of doctors and 19 percent of nurses work there (Hamilton and Yau 2004). To compound the problem, in some francophone Sub-Saharan African countries, such as the Democratic Republic of Congo, Côte d'Ivoire, and Mali, the overproduction of health workers relative to the capacity for absorption has led to medical unemployment in urban areas and shortages in rural areas (Codjia, Jabot, and Dubois 2010).

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Health Sector Overview in the Six Focus Countries

Introduction

This chapter examines the health sector characteristics in the six focus countries—Colombia, Costa Rica, Jamaica, Panama, Peru, and Uruguay—providing a comparative overview through snapshots of each country’s health system. It describes health outcomes and key human resources for health (HRH) indicators across countries.

Country Snapshots

Colombia

Colombia’s health system is characterized by pronounced horizontal and vertical fragmentation in its institutional structure and services. In 1993, the country undertook an extensive health system reform, through Law 100, which aimed at achieving universal access to social insurance and health services for the entire population. The reform introduced a managed competition model, whereby private health insurance would foster efficiency, quality, and cost containment. As part of this reform, a compulsory health insurance system was established, encompassing two broad streams: a contributory regime (CR) and a subsidized regime (SR). The CR was designed to cover all individuals in the formal sector and their dependents. The SR covers most of the population outside the formal sector, but supply-side constraints continue to pose important obstacles in the effort to reduce inequalities in access to quality services.

The CR and SR are both financed with public revenues, but through different mechanisms. The CR is financed through earmarked payroll taxes pooled into a single large fund—the Solidarity and Guarantee Fund (FOSYGA for its Spanish acronym)—which includes various accounts. FOSYGA not only works as a cross-subsidization pool among CR enrollees, but also performs as a major cross-subsidy mechanism between the CR and the SR (Montenegro Torres and

Bernal Acevedo 2013). The SR is financed through a combination of public resources from federal, state, and municipal governments, and through the cross-subsidy of the CR (1.5 percent of payroll tax is earmarked for the SR). In 2007, the SR received 49 percent of its funding from the federal government, 36 percent from FOSYGA cross-subsidy transfers, and 14 percent from municipal taxes (Ruiz Gomez and Puerto Garcia 2012). Individuals eligible for CR and SR have health insurance coverage provided by health plans known as Health Promotion Companies (Empresas Promotoras de Salud, or EPS for the Spanish acronym).¹ EPSs organize the delivery of health services through a variety of arrangements that include contracting with individual public and private health care providers.

Costa Rica

Costa Rica's health system has achieved almost universal insurance coverage, increasing from 47.2 percent coverage in 1970 to 91.9 percent in 2011 (Costa Rica, Ministerio de Salud 2012). During 1992 and 1993, the country's health system underwent its most recent health reform, which included the following main contributions to develop Costa Rica's health sector:

- Readaptation of the model for the first level of care
- Management contracts²
- Deconcentration of health services combined with the introduction of health committees
- Institutional reform

The Ministry of Health (MINSAs, in its Spanish acronym) assumed its role as the governing body and transferring to the Costa Rican Social Security Fund (Caja Costarricense de Seguro Social, CCSS) preventive health care activities. The creation of the CCSS in 1941 was part of a series of institutional reforms undertaken in support of the Costa Rican people. During that period, major reforms were undertaken to expand coverage for the population. The delivery of public health services is dominated by the CCSS, an autonomous institution charged with the financing, purchase, and provision of the majority of health services to the population. The private sector includes a broad network of providers who offer outpatient and specialized services on a for-profit basis. These services are financed primarily by out-of-pocket payments, as well as through private insurance premiums. MINSAs directs actions that affect the population as a whole, and to this end it relies on a network of operational units at the regional and local levels that are charged with epidemiological surveillance and control. MINSAs is also the system's governing body, responsible for policy direction, public health regulation, health care, epidemiological surveillance, research direction, and technological development (Sáenz and others 2011). CCSS provides public health services in an integrated manner, whereas the private sector offers a patchwork of services, which makes it difficult to obtain information on this sector.

Jamaica

As part of its health reforms, Jamaica removed user fees, which led to an increase in utilization of health services and an insufficient HRH supply. Jamaica has undergone a number of health reforms. In 1978, the country developed a primary health care system, supported through a World Bank loan, and in 1997–1998 progressed to a second wave of reform, implementing a decentralized system of health care. This health reform organized Jamaica's health system into four Regional Health Authorities (RHAs) with direct management responsibility for the delivery of public health services, including the financial management and human resources, within their geographically defined areas.

The Ministry of Health's role subsequently shifted to setting policies, norms, and standards; developing strategic planning; and carrying out monitoring and evaluation. In 1977, access to services in the public sector was free to the user, in keeping with the primary health care focus. Structural adjustments undertaken in the 1980s and recommendations of the WHO's 1993 *World Health Report*, which supported user fees, resulted in the introduction of cost-sharing measures, with nominal user fees established in primary-, secondary-, and tertiary-care facilities. Collecting user fees presented a challenge, in that only 12–16 percent of such fees were collectable. It was thought that access to health care by the poor was compromised by these user fees. In May 2007, user fees were abolished for minors, and in April 2008, user fees for everyone else were abolished. The removal of user fees led to an increase in utilization of primary health services, which peaked in 2009. However, as the demand for health services grew, particularly at the primary health care level, the supply of critical human resources (nurses, midwives, and pharmacists) and services did not keep up with the demand. This has resulted in larger clinics; a restructuring of clinics to include an extension of working hours, which places added stress on human resources; a reduction in the quality of care; and challenges in meeting the client demands that have led to longer waiting times and appointments and greater client dissatisfaction.

Panama

Panama's health system is characterized by fragmentation of services between MINSAs and the Caja de Seguro Social (Social Security Fund, or CSS for its Spanish acronym). MINSAs, in its stewardship role, is responsible for setting and approving the country's national health policy. The Ministry also provides health services in the public sector to any individual, foreign or national, who seeks care; its health services are more limited than those offered by the CSS or by private providers. The regulation, management, and performance of essential public health functions are the exclusive responsibilities of the Ministry of Health, but harmonizing the provision of health services, dealing with the system's financing, and conducting insurance oversight are responsibilities that MINSAs share with the CSS and the Ministry of Economy and Finance. The Ministry of Health also shares some management functions with other

institutions, such as the Gorgas Memorial Institute for Health Studies (Instituto Conmemorativo Gorgas de Estudios de la Salud), the Technical Health Council (responsible for licensing medical practice), and the National Environmental Authority (responsible for environmental regulation). CSS offers services to its insured population, which include those who contribute to the system and their direct beneficiaries.³ The CSS-covered population, be it a direct beneficiary or a dependent, accounted for 81.4 percent of the total population in 2012. Despite its high coverage rate, CSS does not have physical presence at a national level, particularly at the primary care level. In areas where only MINSA has physical establishments, the CSS insured population accesses care through MINSA, but CSS does not compensate MINSA for these services due to difficulties in registering such activity. This fragmentation in the provision of services between MINSA and the CSS is also reflected in each institution's differing policies for health workers.

Peru

Peru's health care system involves multiple service and insurance providers, often working with a high degree of overlap and little coordination. Peru's decentralized health care system is administered by five entities: MINSA, which provides health services for 60 percent of the population; Seguro Social en Salud, or EsSalud (Social Health Insurance),⁴ which covers 30 percent of the population; and the Armed Forces (FFAA), National Police (PNP), and the private sector, which together provide services to the remaining 10 percent (Peru, Ministerio de Salud, 2011). In 2009, Peru's Congress approved the Framework Legislation for Universal Health Insurance (Ley Marco de Aseguramiento Universal en Salud, known as AUS for its Spanish acronym),⁵ which guarantees every person's right to social security in health. The legislation establishes the three existing insurance streams—contributory, semi-contributory, and subsidized systems—that together cover slightly more than 63 percent of Peru's population. The contributory scheme involves mandatory contributions of the covered workers and voluntary contributions of the self-employed through the payment of premiums, and covers 27 percent of the population. The semi-contributory system covers 0.2 percent of the population and is financed through the voluntary contributions of people out of poverty of microenterprises that are that are part of the formal sector of the economy, as well as public funding. The subsidized scheme covers the poorest groups, insuring 36 percent of the population through the Comprehensive Health Insurance (Seguro Integral en Salud, SIS). The implementation of AUS and associated policies related to universal health insurance has led to an increased demand for providers, especially medical specialists.

Uruguay

Uruguay's structural health sector reforms have brought the country to a point where most (about 95 percent) of its 3.4 million population is covered by some coverage scheme. The country's professional medical sector has very special

characteristics. It is the oldest professional group in Uruguay, accounting for the largest share of the budget; it also is the profession that turns out the greatest number of postgraduates and the greatest number of instructors. Moreover, it is the professional sector with the highest number of members holding several jobs simultaneously. Although in terms of percentage Uruguay's physician's group is one of the largest in the world, open unemployment levels are not very high (Rey 2007). In 2005, Uruguay embarked on structural reforms through a process that sought and achieved a high degree of social consensus; this led to the establishment of a new legislative framework that was implemented in phases between 2005 and 2008. A key component of the new structure was the creation of a new National Integrated Health System (Sistema Nacional Integrado de Salud, or SNIS for its Spanish acronym), which functions as an overarching legal framework for the provision of mandatory health care coverage by furnishing a benefit plan to roughly 95 percent of the population. The National Health Insurance (Seguro Nacional de Salud, SNS for its Spanish acronym) was created within the context of this reform as the sole national insurance entity, which was funded through a uniform, essentially contributory scheme composed of employer and employee contributions based on income and household size. The resources constitute the single National Health Fund (Fondo Nacional de Salud, or FONASA for its Spanish acronym), which finances first-level insurers. The SNIS stipulates that care should be provided to beneficiaries through private insurers, integrated public service providers such as the State Administration of Health Services⁶ (Administración de los Servicios de Salud del Estado, or ASSE for its Spanish acronym), and private providers such as the collective medical care institutions (IAMCs for their Spanish acronym). Those population groups that are included in the SNIS but that do not contribute to FONASA receive care from the public health provider, especially the ASSE network; this care is financed by the public budget. Another important aspect of the reform has been the clarification of institutional roles, whereby the functions that were once performed only by the Ministry of Health have been distributed across several agencies.

Comparative Country Overview

Although the six countries under study share similarities across many key indicators, they have significant differences in terms of per capita gross domestic product (GDP), population, and levels of poverty. Five are classified as upper-middle-income countries (UMICs), and one (Uruguay) is classified as a high income country (HIC). Literacy and life expectancy generally fall within a common range, with literacy rates between 87.0 percent and 98.1 percent, and life expectancy between 73.3 years and 79.7. Areas that show the most notable differences are per capita GDP, population size, and poverty level. Per capita GDP ranges widely, from a low of US\$5,449 in a UMIC, such as Jamaica, to a high of US\$14,703 in a HIC, such as Uruguay. This difference in per capita GDP is not only seen between UMICs and HICs, but also among UMICs, such as by

Table 2.1 Demographic and Socioeconomic Indicators, Colombia, Costa Rica, Jamaica, Panama, Peru, and Uruguay, Various Years

<i>Indicator</i>	<i>Colombia</i>	<i>Costa Rica</i>	<i>Jamaica</i>	<i>Panama</i>	<i>Peru</i>	<i>Uruguay</i>
Income status (HIC, MIC, LIC)	UMIC	UMIC	UMIC	UMIC	UMIC	HIC-non OECD
Per capita GDP, 2012 (current US\$)	7,748	9,386	5,449	9,534	6,796	14,703
Population, 2010 (in millions)	47.7	4.8	2.7	3.8	29.98	3.4
Poverty (%)	32.7 (2012)	20.3 (2012)	17.6 (2010)	27.6 (2011)	25.8 (2012)	12.4 (2012)
Literacy (%)	93.6 (2011)	96.3 (2012)	87 (2011)	94.1 (2010)	92.9 (2007)	98.1 (2010)
Life expectancy at birth, 2012 (in years)	73.8	79.7	73.3	77.4	74.5	76.9

Source: World Bank DataBank 2013.

Note: HIC = high-income countries; GDP = gross domestic product; LIC = low-income countries; MIC = middle-income countries; OECD = Organisation for Economic Co-operation and Development; UMIC = upper-middle-income countries.

comparing Jamaica and Peru, two of the countries with lower per capita GDP, with Costa Rica and Panama, two countries with higher per capita GDP. Population size also reflects a wide range among countries; Colombia has the largest population at 47.4 million, and Jamaica has the smallest at 2.7 million. This disparity reflects somewhat in the poverty rate, with Colombia having the highest rate among the six countries. That said, Peru, the country with the second-largest population, has poverty rates below those in Panama, despite the latter's smaller population (table 2.1).

Health Outcomes across Countries

As can be seen in the six case studies, as countries evolve along the economic development spectrum, they need to pay more attention to noncommunicable diseases (NCDs), while they continue to address basic health issues (table 2.2). Of all the countries studied, Panama has the highest rates of infant and under-5 mortality and the second highest rate for maternal mortality. Panama also has the lowest diphtheria, pertussis, and tetanus immunization coverage among children ages 12–23 months. Following Panama, Peru has the highest rate of maternal mortality and the second highest rate for under-5 mortality; Jamaica ranks third among the six focus countries on maternal and infant mortality; and Colombia ranks second and third for infant mortality and for under-5 mortality, respectively. Death rates from NCDs in all six countries reflect their epidemiological transition. Uruguay, the only HIC in the group, has the highest rate of deaths from NCDs—85 percent. Costa Rica and Jamaica follow, with 82.8 percent and 78.9 percent, respectively (table 2.2).

HRH Indicators across Countries

Overall, data availability on key HRH indicators reflects good coverage and opportunities for further strengthening efforts. Uruguay reports the highest rates across the four key HRH indicators (table 2.3), with the most physicians (3.7), nurses and midwives (5.5), and hospital beds (2.5) per 1,000 population,

Table 2.2 Health Outcome Indicators, Colombia, Costa Rica, Jamaica, Panama, Peru, and Uruguay, Various Years

<i>Indicator</i>	<i>Colombia</i>	<i>Costa Rica</i>	<i>Jamaica</i>	<i>Panama</i>	<i>Peru</i>	<i>Uruguay</i>
Maternal mortality (per 100,000 live births)	72.9 (2009)	23.1 (2011)	89 (2008)	92 (2010)	93 (2010)	8 (2010)
Infant mortality rate (per 1,000 live births)	15.1	8.6	14.4	15.9	14.1	6.2
Mortality rate, under age 5 (per 1000)	17.6	9.9	16.8	18.5	18.2	7.2
Deaths from noncommunicable diseases (% of total)	69.3	82.8	78.9	69.7	66.3	85.3
Immunization coverage DPT (% of children 12–23 months) 2012	92	91	99	85	95	95

Source: World Bank DataBank 2013.

Note: DPT = diphtheria, pertussis, and tetanus.

Table 2.3 Key HRH Indicators, Colombia, Costa Rica, Jamaica, Panama, Peru, and Uruguay, Various Years

<i>Indicator</i>	<i>Colombia</i>	<i>Costa Rica</i>	<i>Jamaica</i>	<i>Panama</i>	<i>Peru</i>	<i>Uruguay</i>
Physicians (per 1,000 population)	1.5 (2010)	1.72 (2007)	0.4 (2008)	1.6 (2011)	1.1 (2012)	3.7 (2010)
Nurses and midwives (per 1,000 population)	0.6 (2010)	0.8 (2013)	1.1 (2008)	2.4 (2011)	1.5 (2012)	5.5 (2010)
Hospital beds (per 1,000 population)	1.5 (2012)	1.2 (2012)	1.7 (2012)	2.2 (2011)	1.5 (2012)	2.5 (2012)
Births attended by skilled personnel (% of total)	99.3 (2012)	99.1 (2011)	98.3 (2008)	88.5 (2009)	86.7 (2012)	99.7 (2009)

Source: World Bank Databank 2013 (World Development Indicators database and Health, Nutrition and Population Statistics database).

and 99.7 percent of all births attended by skilled health personnel. Panama follows Uruguay with the second-highest rate of nurses and midwives (2.4) and hospital beds (1.5) per 1,000 population. Despite the fact that Peru has the third-highest rate of nurses and midwives (1.5) among the six countries, it still needs to strengthen its HRH efforts in the areas of physicians and hospital beds per 1,000 population, where it ranks second to last, and particularly in births attended by skilled personnel, where it ranks last (table 2.3).

Notes

1. The generic term EPS includes a variety of public and private health plans acting as fund holders and governed by a broad set of regulations and norms depending on their specific legal form. By 2010, there were about 70 EPSs nationwide.
2. This is a system for distributing funds based on “management contracts.” Its aim is to allocate resources based on a prospective analysis of the population’s health needs in each health area, establishing annual performance targets between the immediate provider (EBAIS, clinic, hospital, cooperative) and the CCSS. The management contracts stipulate the quantity and quality of the services offered, the amount of financial resources required, and the type of evaluation applied, among other elements. This is a per capita, prospective payment system and includes a 10 percent incentive.

3. These are not exclusively health services, but include social security in cases of illness, maternity, disability, old age, widowhood, orphanhood, burial, work accidents, and professional illness.
4. EsSalud, the national health insurance agency, is an autonomous, decentralized public entity attached to the labor and social welfare sector.
5. Law No. 29344.
6. ASSE was established as an autonomous agency by the reform process, and it fulfills both provider and insurer roles.

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Financing of the Health Workforce

Introduction

The availability and quality of human resources for health (HRH) in countries with limited financial resources represent a challenge for these countries' health policies. Human resources in health are an essential input for the development of health systems. In order to be able to set priorities, develop policies, and plan for human resources, countries must be able to rely on sensitive instruments and methods for identifying problems and facilitating decision-making by management in regulatory agencies and in private and public sector organizations.

Financing of the Health Systems

Key Messages

- Colombia and Costa Rica are experiencing downward trends in health expenditure as a percentage of GDP.
- Panama's fragmented health system has been experiencing increasing per capita health expenditures, which have risen above the average in the Latin America and the Caribbean (LAC) and forced the government to absorb a greater percentage of the country's added health expenditure.
- In Jamaica and Peru, out-of-pocket spending is high, nearing 35 percent of total health expenditures in Peru and accounting for roughly one of every three dollars allocated to Jamaica's health system. High out-of-pocket expenditures can act as a barrier to care, especially for the uninsured.
- In Uruguay, direct household expenditures and the payment of joint and individual contributions have fallen as a result of health structural reforms.

Financing

Considering health financing indicators, the six focus countries tend to fall into one of two contrasting groups. Costa Rica, Panama, and Uruguay, for example, have higher percentages of total and public health expenditures as a percentage of GDP, compared to Colombia, Jamaica, and Peru. In terms of per-capita health expenditures, Uruguay has the highest, followed by Costa Rica and Panama.

Regarding OOP health expenditures, Peru and Jamaica have the highest such health expenditures as a percentage of total expenditures on health; Costa Rica, Panama, and Uruguay follow, with Colombia having the lowest. The same groupings occur when considering external resources for health as a percentage of total expenditures on health—Jamaica (1.675), Colombia (0.561), and Peru (0.521), all show rates higher than Panama's (0.291), Costa Rica's (0.064), and Uruguay's (0.066) (table 3.1).

In Colombia, government spending in health, as a percentage of GDP, was around 6 percent in 2012; which includes both government and private spending. Total health expenditure is estimated at 73 percent of government expenditure and 27 percent of private expenditure. The country is experiencing a trend toward reduction in health expenditure as a percentage of GDP, which may be related to the fact that other sectors of the Colombian economy have experienced growth, especially over the past 10 years. Spending on social health care has dropped sharply from its level at the beginning of the reforms, when it hovered around 87.9 percent of total health expenditures (Barón 2007). Moreover, the distribution of social-insurance expenditures shows that almost half corresponds to financing from the contributive system. Spending in the subsidized system is significantly less, even though it covers more people than does the contributive system. The distribution difference comes about because the insurance premium in the subsidized system is lower—US\$217 for the contributive capitation payment unit (CPU) and US\$124 for the subsidized CPU in 2009. OOP health expenditure as a percentage of the total health expenditure also has dropped considerably, from 12 percent in 2001 to 8 percent in 2009. Average monthly health expenditure per capita was Col\$32,916 (US\$18.30) in 2003 and Col\$19,868 (US\$11.00) in 2008.

Table 3.1 Health Expenditure Indicators, Colombia, Costa Rica, Jamaica, Panama, Peru, and Uruguay, Latest Available Data

<i>Indicators</i>	<i>Colombia</i>	<i>Costa Rica</i>	<i>Jamaica</i>	<i>Panama</i>	<i>Peru</i>	<i>Uruguay</i>
Health expenditures, total (% of GDP)	6.84	10.12	5.92	7.58	5.07	8.89
Health expenditures, public (% of GDP)	5.18	7.55	3.25	5.2	2.98	6.08
Health expenditure, public (% of total health expenditure)	75.78	74.62	54.87	68.6	58.91	66.62
Health expenditure, public (% of government expenditure)	18.53	27.65	10.65	12.7	18.32	25.16
Health expenditure per capita (current US\$)	529.82	950.84	318.47	723.25	337.29	1,307.95
Health expenditure, private (% of GDP)	1.65	2.57	2.67	2.38	2.08	2.88
Out-of-pocket health expenditure (% of total expenditure on health)	14.76	23.08	28.93	24.8	35.72	16.53
Out-of-pocket health expenditure (% of private expenditure on health)	60.94	90.98	64.1	79.02	86.95	49.52
External resources for health (% of total expenditure on health)	0.561	0.064	1.675	0.291	0.521	0.066

Source: World Bank, World Development Indicators 2015.

Despite the country's solid insurance coverage, Costa Rica's government expenditure in health has sustained a downward trend. Total expenditure in the health sector, as a percentage of GDP, stood at 7.62 percent in 2011 (Costa Rica, Ministerio de Salud 2013). Within the public sector, financing for the Costa Rican Social Security Fund (CCSS for its Spanish acronym) is based on a tripartite contribution system (employers, workers, and the State). As of this writing, the contribution rate amounts to 22.91 percent of the payroll, with employers contributing 14.16 percent, divided as follows: 9.25 percent for illness and maternity insurance (SEM for its Spanish acronym) and 4.91 percent for disability, old-age, and death insurance (IVM for its Spanish acronym). Workers contribute 8.25 percent, with 5.50 percent going to SEM and 2.75 IVM. Finally, the State contributes 0.50 percent, split evenly between SEM and IVM. Voluntarily and independently insured individuals make contributions based on their reported income, with the State contributing 0.25 percent. The poor, and those who otherwise cannot afford to contribute to the CCSS, are covered by noncontributory systems that are financed by the state through the Fund for Social Development and Family Allowances and through taxes levied on electronic lottery activities and the sale of cigarettes and alcohol. The private sector is financed directly by out-of-pocket payments by users at the time of treatment.

In recent years, the state's debt has accumulated, owing to the almost total absence of payment of contributions to the CCSS. In spite of the fact that CCSS is required to have alternative means of financing, such as bonds and investments, the fund's main source of funds is the employee/employer/state contribution scheme, such that in the face of a possible reduction of the institution's financial resources, not only will the income of health human resources be affected, but so will the quality of health service delivery. Although there has been a steady increase in the use of private services, the public sector has almost universal coverage in the country, indicating a significant responsibility for the fund.

Jamaica's health sector has been financed through a mix of public and private sources. The financing and provision of public health care services is primarily under the responsibility of the government, with some supplementation provided from nongovernmental organizations and international development partners (Planning Institute of Jamaica 2012). The national health expenditure is a composite of the three main financing sources; general taxation (57 percent), OOP spending (29 percent), and private health insurance (about 19 percent). The public sector largely finances hospital care, primary health care services, and regulatory functions. The private sector covers ambulatory care, pharmaceuticals, diagnostics, and overseas treatment (WHO 2011). The central government assigns the budget to the Ministry of Health (MOH), which then transfers about 86 percent of it to the country's four Regional Health Authorities (RHAs) for the provision of health care services (Chao 2013).

The government also provides funding for the National Health Fund (NHF) to subsidize drugs for patients who suffer from NCDs and to invest in public health programs and health infrastructure. NHF funding sources derive from tobacco, payroll, and special consumption taxes (see details in

section on NHF) (Chao 2013). In 2008, the government abolished user fees at public health facilities, and with this measure, general taxation is the only means of financing the health sector, except for small amounts collected from private insurance companies. The abolition of user fees was an initiative to minimize the impact of out-of-pocket expenditures as a barrier to access to care (IOS Partners Institute and IOS Social Development LLC 2012). Out-of-pocket spending is high in Jamaica, accounting for roughly one in every three dollars allocated to the system and representing a barrier to care affecting one in five Jamaicans, in that less than 20 percent of the population has health insurance (Barnett 2013).

Panama's health system is fragmented, with the public sector having two different funding sources. Panama's per capita health expenditures have been continuously rising, increasing from US\$293 in 2001 to US\$723 in 2012, which is higher than the LAC average of US\$661. Panama's public health spending is also among the highest in the region, with the government absorbing a rising percentage of Panama's increased health expenditure. Private health expenditures have increased in real terms, representing 33 percent of total health expenditures in the 2001–11 period. The MOH and the Social Security Fund (Caja de Seguro Social, CSS) together finance Panama's public health sector. CSS covers 81.4 percent of the population, either as directly insured or as dependents of the insured, and provides pensions, medical services, and workers' compensation. The remaining 20 percent are covered by the MOH network, which provides services to the entire population and is financed through general taxes.¹ The CSS is financed by six sources, including taxes, employee quotas (9.25 percent of salaries), employers quotas (12.25 percent of the salary of an insured worker), independent-worker quotas, quotas from pensioners, and revenues from its own administration (Postigo 2014).

Peru's total health spending is 5 percent of GDP, below what is expected of an upper-middle income country. A high percentage (approximately 35 percent) of this is private spending, mostly OOP. The contribution of employers to EsSalud—the social security system for health—accounts for another 31 percent of spending, and financing from the national treasury, for another 31 percent. EsSalud serves about a quarter of the population, which is primarily located in cities, where work in the formal sector is available (employees pay a mandatory 9 percent of salaries as a contribution to the system). EsSalud also covers a small proportion of independently insured individuals. Legally, EsSalud insures against all risks to health, without any limitations, and covers wage losses due to illness and maternity leave. EsSalud contracts with few private providers, although it recently initiated a contract for the construction and operation of two large private hospitals that should eventually serve 500,000 policyholders. The national police, the army, the navy, and the air force have their own insurance and providers. Regional governments do not collect taxes and depend on transfers from the public treasury. The emerging private sector is expanding primarily in urban areas,

as a result of strong economic growth in the last decade. Private-sector health services are mainly financed through OOP payments. For non-serious illnesses, much of the population goes to private pharmacies for medical consultations, where they can also get prescription drugs without a prescription (although this is illegal). Private insurers cover a small percentage (3–5 percent) of the population, but this coverage is expanding. In addition, the Social Security Health Act allows workers in the formal sector to contract with a private insurer, health providing companies (*Empresas Prestadoras de Salud*), and contribute one-quarter of the mandated contribution to social security (2.25 percent of their monthly salary). The contribution to the health providing companies entitles its members (who are basically middle class) to only a basic amount of care, and many choose to pay an additional amount to obtain broader coverage.

The high level of public sector financing in Uruguay is noteworthy. In contrast, OOP expenditures and the payment of joint and individual contributions have fallen as a result of the reform. Private sector health financing fell from 49 percent in 2005 to 36 percent in 2008. This structural change in the sources of financing coincides with the significant increase in the public budget allocated to the health sector via a larger budget for the Ministry of Public Health and the State Health Services Administration (*ASSE* for its Spanish acronym) and higher social security revenue resulting from the new, prorated amounts going to the NHF (*Fondo Nacional de Salud*, or *FONASA* for its Spanish acronym). This trend appears to have become more marked in 2009 with the inclusion of a higher number of national social security participants. The substantial change in the health system's public financing method as a result of the reform has led to a significant increase in the share of general taxes and more of the social security contributions going toward the financing of the health system. Taken together, this has led to greater equity in terms of financing the system and, consequently, to strong public support for and sustainability of the reform process. According to the most recently available data (Uruguay, Ministerio de Salud Pública, and PAHO 2010), total health sector expenditure in Uruguay is broken down as follows: 26.1 percent from the national treasury, 36.7 percent from health insurance, and the remaining 36.2 percent from OOP expenditure.

Contracting and Payment Mechanisms for Health Workers

Key Messages

- The six focus countries rely on various contracting arrangements to hire health workers, such as salaried (permanent), temporary (part-time or short-term), fee-based, and performance-based contracts.
- As part of their contracting schemes, some countries are utilizing modalities that reward performance, such as Colombia's capitation-payments based on the quantity of services provided and Costa Rica's payments based on the achievement of performance targets.

- Jamaica and Peru have hired more than 30 percent of their health workforce (specifically nurses in Jamaica) through temporary contracts, which results in the instability of the workforce.
- In Panama and Peru, national level planning is needed to address the lack of clear criteria on the type of contracting mechanism used (Panama) and the wide range of salaries and benefits available to health professionals (Peru).
- According to Uruguay's contracting approach, private sector health workers have a say in their employment conditions, whereas in the public sector, the State and the unions make these decisions.

Mechanisms

Colombia uses various types of contractual arrangements for hiring health professionals: as salaried employees, through temporary contracts, through payments to outsourcing companies, or through professional fees (most commonly used for medical specialists); some institutions have established a permanent work relationship with specialists as salaried employees. Usually, the payment mechanism used at primary-care outpatient facilities is capitation to the facility by insured groups based on geographical proximity. The capitation amount depends on the quantity of services provided to the insured population. At higher complexity levels, the usual payment for hospitals is fee-for-service, with a portion of the payment for each procedure covering professional fees. Arrangements to outsourced human resources consortia most commonly are piece-work contracts that are paid by the hour or as fee-for-service. A human resource consortium and the hospital sign a contract for the delivery of professional and specialist. Medical specialists are generally contracted through a fee-for-service scheme, which makes them subject to set rates that have been agreed upon between insurance providers and service providers.

In Costa Rica, "management contracts" are used as the legal and technical instrument for establishing an agreement between the agency purchasing services and the health-service provider. The provider, which may be a basic health team for integrated health care (Equipo Basico de Atención Integrada de Salud, or EBAIS² for their Spanish acronym), a clinic, a cooperative, and/or a hospital, establishes the health goals and performance targets, and determines the financial resource allocation based on those targets. Even though these contracts assess the performance of the health center (number of appointments, prescriptions, treatments, and procedures), they are not obligated to monitor health human resources. In conjunction with the implementation of management contracts, the 1998 Law on the De-concentration of CCSS Hospitals and Clinics set up health committees designed to promote citizen participation, thereby aligning the organization's objectives with those of the community. Health committees are composed of two employer representatives, three representatives of the insured population in the health center's service area, and two representatives from hospital and clinic associations in the area, all of whom serve on a volunteer basis. Committee members are charged with helping the health center's director oversee proper budget execution; prepare criteria for

management contracts; and participate in the definition, for hospitals and clinics, of general policies and priorities relating to investment, administrative recruitment, and the promotion of and incentives for workers. Health committees are not vested with powers, however, and can only make suggestions and issue complaints (Sáenz and others 2011).

Jamaica, relies on permanent or temporary contracting mechanisms for hiring health workers. Of the 5,230 nurses and midwives employed, 50.0 percent work under permanent contracts, 29.0 percent are considered temporary (in the absence of full-time posts), 1.4 percent work through contractual arrangements (expatriates and those lacking posts), 3.0 percent are employed on a sessional basis, and 0.4 percent work part-time. The reemployment of retired nurses and midwives—3 percent of working nurses are re-employed retirees—has been used as a strategy to help fill shortages. This practice raises concerns about tenure security. Nurses and midwives recruited from outside the country account for 2.7 percent of such HRH currently working. Consultations conducted as part of this country's case study led to the consensus that persons employed on a temporary, contract-only, or to cover short appointment sessions should be considered as precariously employed. Available data from Ministry staff listings and its 2010 employment census indicate that approximately 19 percent of primary health care workers (inclusive of doctors) were precariously employed (Jamaica, Ministry of Health and PAHO 2011).

Panama's contracting mechanisms for health workers include permanent assignments and temporary contracts. The contracting of technical and administrative personnel can be done as either a permanent appointment or as a temporary contract. Given that Panama lacks an in-depth estimate of the national HRH needs required for the planning and decision-making regarding such resources, the criteria for choosing one or the other contracting mechanism is not clear. It appears that decisions regarding the choice of contracting mechanism are based on each health installation's needs.

Peru, too, relies on many different contracting mechanisms for health care professionals. As a result, these professionals are offered widely differing salaries and benefits. Workers with permanent contracts, for example, may receive as much as twice the salary as do those hired under temporary contracts, such as those recently hired under an Administrative Services Contract modality (Contrato Administrativo de Servicios, or CAS for its Spanish acronym). CAS was created as a way to improve the contracting system by organizing contracts under a non-personal services scheme (Servicios No Personales, SNP for its Spanish acronym) and establishing length of employment, schedules, and duties to be performed. Since then, the many Peruvian health sector workers that had been working under the SNP have shifted to CAS. The temporary nature of these contracts has led to workforce instability, however (Peru, Ministerio de Salud 2011). Data on health human resources currently working in the public sector shows that 53 percent of them are appointed (which can be considered as permanent employment), while 32 percent works under the CAS scheme (which by its very nature is a temporary contract). In addition, among health-care

professionals, 11 percent are serving their year of rural and urban-marginal health service (SERUMS for its Spanish acronym),³ and this proportion can go up to 25 percent in departments or regions with larger proportions of rural areas.

In Uruguay, contracting modalities for health workers reflect differences between the public and private scheme. The public sector's contracting mechanism—the State Health Services Administration (Administración de Servicios de Salud del Estado, or ASSE)—is purely an employer-employee relationship. Remuneration policies are discussed and agreed on by the State, as the employer, and by the unions, which represent the health workers; decisions are binding for both parties. In the private sector, the contracting is handled by collective medical care institutions (Instituciones de Atención Médica Colectiva, or IAMC for their Spanish acronym), and they give workers a say in determining employment conditions. There are two types of IAMC: mutuals (*mutualistas*) which are the property of their affiliates, and groups of associated doctors set up as medical cooperatives, nonprofit civil societies, or public limited companies (*sociedades anónimas*). Uruguay's Medical Union (Sindicato Médico del Uruguay, SMU for its Spanish acronym) also forms part of this private-sector arm, in that it is the country's largest organization of private medical care. In contrast with the ASSE, the IAMC negotiates with various groups, each with an ownership role over their own association, which alters the typical employer-employee relationship. The ASSE handles five different types of contracting mechanisms between public providers and physicians: staff physicians who have permanent positions, *locum tenens* physicians who fill vacancies, physician slots created by ASSE to fill positions and provide services to prevent any disruption in its services, residents who are physicians completing their specialized professional training in public hospitals under a special legal system, and “incentivized” and contracted physicians.

Salary Levels of Health Providers

Key Messages

- Salary levels for health professionals in Colombia and Costa Rica are attractive when compared to those of other sectors, especially for individuals with specialized degrees, as is the case in Colombia.
- Jamaica and Peru (in SERUMS) both have lower salary levels for health professionals working at the primary care level compared to the secondary level of care.
- Panama and Uruguay have clear salary scales that are harmonized for both the MOH and for social security in Panama and that are outlined for each specialization category in Uruguay.

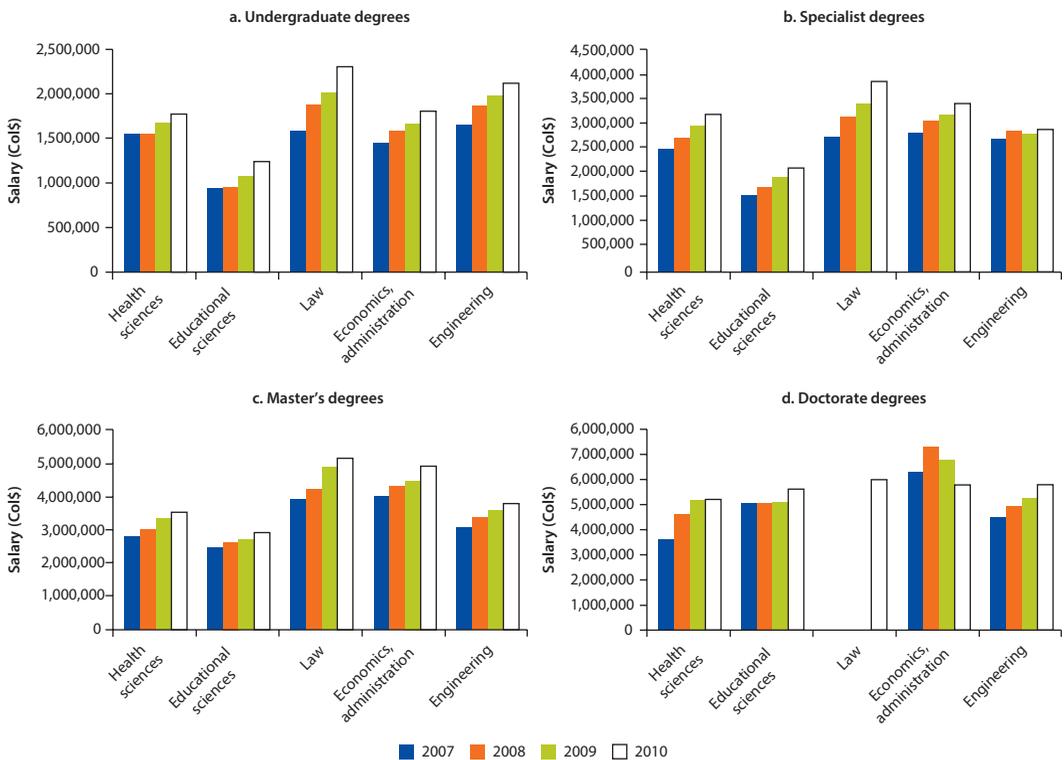
Salary Levels

Colombia's salary trends for those working in the health sciences differ according to degree level. The public sector's pay grades for civil servants is coordinated by the Public Management Department, which sets salary premiums based on education level for master's or doctorate degrees. In private institutions, salary grades are

determined by each organization’s own. Figure 3.1 shows salary trends in Colombia for different professions and undergraduate degrees, specializations, masters’ degrees, and doctorate degrees. Professionals who graduated in education sciences at all education levels were paid the lowest wages. Health sciences at the undergraduate and master’s levels have lower salaries than areas such as engineering, law, economics, administration, and other similar areas. Over time, salaries for specializations and doctorates in health sciences have been increasing more than have those for engineering degrees. Professionals with a doctorate degree in health sciences, such as engineers, have increased their average salaries, on a par with educational sciences; however, their salaries are still significantly lower than those in the fields of economics, administration, etc. (figure 3.1). Pay levels vary among professions, with physicians receiving the highest salaries (nearly Col\$2.00 million), followed by dentists (Col\$1.65 million), and then nurses and bacteriologists (Col\$1.35 million).

Costa Rica’s Law No. 6836, on Incentives for Professionals in the Medical Sciences, sets forth the salary scale and a series of salary incentives for health professionals; the legislation is applicable in the public and private sectors.

Figure 3.1 Average Salaries for Professionals with Undergraduate Degrees, Specialist Degrees, Master’s Degrees, and Doctorate Degrees, Colombia, 2007–10



Source: AGCAS and Graduate Prospects Ltd. 2013.

Note: No data are available for doctorates in law from 2007–09.

Passage of the law came about after medical-science professionals called a strike. Because of its rapid passage by the Legislative Assembly (owing to the fact that the strike brought medical services to a halt), the CCSS was not consulted to compare salaries of health professionals who were not considered to be underpaid at that time. Over time, this legislation has led to a salary imbalance relative to other government employees. The law grants special forms of compensation to health professionals. Essentially, public sector human resources are considered salaried employees, while private-sector employees are paid by service provided. These approaches have particular implications for workforce performance.

Jamaica experiences significant gaps in health worker salaries, depending on the health-care level and when compared internationally. For example, an entry-level registered nurse (RN) working in primary care earns less than an RN working in secondary care; if sessions are excluded, a primary-care nurse earns 37 percent less. Disparities also exist between Jamaican professionals and their counterparts at the regional and international levels, especially in countries that are primary destination for out-migrating Jamaican professionals. In the United Kingdom, an entry level RN expects to earn US\$33,460 per year, compared to US\$9,110 per year in Jamaica (AGCAS and Graduate Prospects Ltd. 2013). In 2009, a World Bank study showed that Jamaican nurses and midwives earned lower hourly salaries when compared with these health professionals in Barbados, St. Lucia, St. Vincent and the Grenadines, and Trinidad and Tobago (World Bank 2009). Salaries of nurses and midwives in the public sector vary by category and staffing level. In 2008, salary agreements resulted in yearly nurse salaries ranging from J\$541,659 (US\$5,810) to J\$2,579,358 (US\$27,650). An enrolled assistant nurse is at the lower end of the scale and a RN (level 10) is at the upper end of the spectrum. Nurses supplement their salaries up to 47 percent with overtime sessions. Midwife salaries range from J\$696,232 (US\$7,460) to J\$1,101,317 (US\$11,810). There is not much difference in compensation between public sector and private sector workers for salaries.

Panama's MOH has aligned the salary levels of its health professionals with those of the Social Security Fund (Caja de Seguro Social, or CSS for its Spanish acronym). The Ministry and the CSS each have their own policies for managing their HRH. Efforts have been under way for some time to further coordinate and harmonize policies across the two institutions. To that end, the Ministry brought the salaries of its health professionals to the same level as those in the CSS in 2013, which resolved a long-standing complaint. Table 3.2 shows the MOH salary scale after salaries were aligned across both institutions.

In Peru, salaries of health professionals in the public sector are significantly lower than in the private sector. Webb and Valencia (2006) published data showing that, within the public sector, physician salaries have decreased approximately 75 percent, from S/.7,974 in 1976 to S/.1,919 in 2004 (adjusted to the value of Nuevos Soles in the year 2001). When the comparison is made between health care professionals in the public sector and those in EsSalud, the gap is even wider. In this case, however, the difference is found mainly among non-medical professionals, with public sector workers receiving up to S/.19,000 less in salary and

Table 3.2 Base and Average Monthly Salary Scale for Health Professionals at the Ministry of Health, Panama, 2014

<i>Professional category</i>	<i>Base salary (US\$)</i>	<i>Current average payroll salary (US\$)</i>
General physician	1,200.00	2,287.89
Specialist	1,566.00	2,612.34
Dentist	1,270.00	2,465.82
Nurse	849.30	1,296.46

Source: World Bank 2014.

annual benefits (Peru, Ministerio de Salud 2011). According to Jiménez and others (2015), significant numbers of graduates do not enter SERUMS and do not ultimately work in the public sector. This factor is partially related to a lack of employment stability and very low salaries offered in the public sector.

Uruguay has two salary scales for physicians, one for the public sector and one for the private sector. The public-sector physicians' salary structure encompasses five types of remuneration: grade-based salary, the remuneration paid to full-time staff or permanent contract physicians; position-based compensation, which entails additional remuneration for all full-time staff or permanent contract positions in each executing unit, whether they are occupied or vacant; special compensation, which is additional remuneration that the public sector employee receives for performing duties at a specific place or in a specific unit, or for carrying out tasks specifically assigned by management; individual compensation, meaning additional remuneration paid to a public sector employee for applying the regulations that establish and govern this type of compensation, irrespective of the position or duties performed, or of the entity at which this employee works; and incentive, additional remuneration that is paid to public employees based on qualifications, diligence, productivity, or any other similar criterion. In the private sector, a salary scale based on collective labor agreements was established, which spells out the pay grade for each position. As a result, the salary structure for physicians in the private sector (IAMC) shows that compensation is determined by using tables agreed upon by various organizations that represent the different areas of operation of private physicians.

Financial Incentives for Health Workers

Key Messages

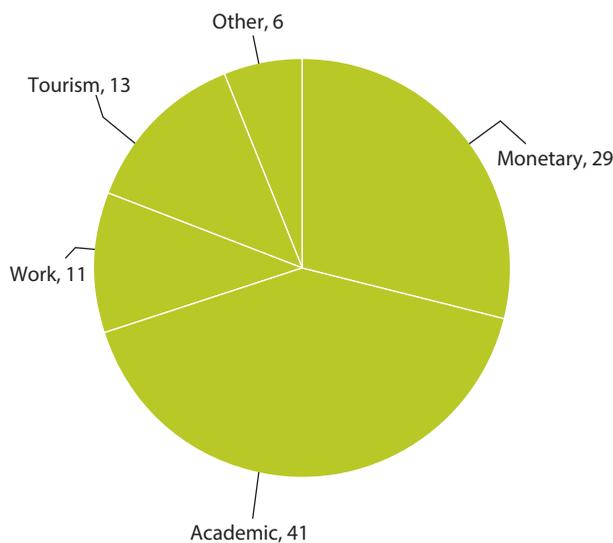
- Colombia, Costa Rica, Jamaica, Panama, and Peru have introduced financial incentives to encourage work in rural, remote areas.
- Costa Rica, Jamaica, and Panama all provide financial incentives to health workers which in the case of Costa Rica have resulted in salary increases and bonuses significantly above that of other categories of professionals.
- In Uruguay, incentives offered to health workers are mainly to align salary levels of the public sector with those of the private sector.

Incentives

Colombia does not have a national policy specifically dealing with incentives for HRH performance. Policies in this regard are determined by each organization in the system. Information on incentives for the country's health workforce is scant, and the only data available is in a study on medical autonomy and its relation to health service provision (Colombia, Defensoría del Pueblo 2007), which was prepared by the country's Ombudsman's Office in 2007. This study summarized information from surveys of medical professionals on working conditions of Colombia's physicians and their autonomy in making treatment decisions and referrals. Only 15.6 percent of physicians surveyed reported having received some type of incentive from the institution where they worked; 41.0 percent reported being offered academic incentives, such as seminars and refresher courses, at some point; 29.0 percent reported having received monetary incentives and 13.0 percent, tourism incentives provided as vacation credit (figure 3.2); and 6.0 percent reported receiving some other type of incentive. In terms of incentives to attract health workers to posts in rural or remote areas, Colombia's strategy is the mandatory social service for health professionals, with time periods and remuneration being granted according to conditions in each territory.

In Costa Rica, Law No. 6836 establishes salary incentives for medical professionals for each year of work at any State institution. In addition to salary incentives, the law grants percentage increases for hospital careers, public administration careers, and outpatient consultations, and it provides study grants. Table 3.3 summarizes the salary incentives provided to each different HRH cadre.

Figure 3.2 Type of Incentive Offered to Health Workers, Colombia, 2007
Percent



Source: Colombia, Defensoría del Pueblo 2007.

Table 3.3 Salary Incentives for Health Professionals (as Set by Law No. 6836), Costa Rica

<i>Health care professional</i>	<i>Incentive</i>	<i>Article of law</i>
Physician	Payment of 5.5 percent for each year of service over the base salary, including work performed at any State institution; 11 percent of the total salary for a hospital career; 11 percent of the total salary for an administrative career; and 3 percent of the total salary for every hour of outpatient consultation, beginning with the fifth hour.	Articles 5 and 6
Dentist	An annual 5.5 percent increase over the base salary; a 1.5 percent incentive for each hour of outpatient consultation; and an 11 percent increase for a hospital or administrative career, provided that this work is in fact performed.	Article 16
Dietician	Dieticians with a Bachelor's degree or higher receive an annual increase of 3.5 percent over the base salary.	Article 16
Pharmacists, chemical microbiologists, clinical psychologists, nurses, and nutritionists	An annual increase of 5.5 percent over the base salary and an 11 percent incentive for full-time status. These benefits are optional and may be revoked.	Articles 17 and 18
University intern	Provision of a study grant of 36.6 percent of the base salary of an attending physician (G-1).	Article 8

Source: Law on Incentives for Professionals in Medical Sciences (Law No. 6836, Articles 5, 6, 16, 17, and 18), Costa Rica, 1982.

The nursing profession is a special case, benefitting both from salary incentives stipulated through Law No. 6836 and from salary incentives provided under Law 7085. Law 7085, the Statute on Nursing Services, and its regulations state that nurses are to be paid by professional category, by academic qualifications (diploma, Bachelor's or Master's degrees), with annual raises of 3.5 percent, and should receive a salary supplement of 15 percent over the base salary. In addition, a maximum of 55 percent for full-time work is to be added to the salary (Article 24),⁴ as well as a payment for a professional career. A comparison of a physician's salary with other government jobs shows that the base salary (without salary supplements) of an attending physician (general) (G-1) is C 764,345, while the salary of qualified individuals working in other areas is C 562,375.83 (Costa Rica, Ministerio de Trabajo y Seguridad Social 2013). This does not take into account the fact that annual public sector salaries increase an average 2 percent, compared to an automatic 5.5 percent received by physicians, who, in addition, receive the public sector salary increase—all told, physicians receive salary increases averaging 7.5 percent. In addition, Articles 10 and 19 of Law No. 6836 stipulate that medical professionals in any category who provide services in Zones 2, 3, or 4 (rural zones) outside the Greater Metropolitan Area), based on the current CCSS zoning regulations, or their equivalent in other institutions, will receive an incentive of 10 percent, 12 percent, and 14 percent, respectively, over the base salary. This is a significant economic incentive in the context of human resource distribution.

Jamaica offers incentives to nurses and midwives in Jamaica, including private health insurance coverage subsidized by the government. Health professionals can also contribute towards a pension plan that is managed by a private entity as an investment fund with certain protective conditions attached. Car loans and duty-free allowances are also available to certain categories of nurses who are

designated travelling officers. Incentive packages are included in the negotiating packages for nurses and midwives. Some incentives, such as the location incentive, are not offered across the board, although all areas can be classified as hardship areas prone to violence. Nurses are placed according to need, but there are no special incentives for nurses who opt to work in rural areas.

Panama has salary incentives (40 percent supplement to the base salary) and housing incentives to encourage health workers to work in marginalized areas, such as the Bocas del Toro and Darién provinces and the installations in Puerto Armuelles, in Chiriquí.⁵ However, these benefits are only granted to non-local professionals who come from a different health region to the one they would be working in. This creates an unequal situation for local human resources, who may be prone to relocate. Of the 9,085 health care workers employed by the MOH, only 9 percent (834) receive the aforementioned supplement. Another key actor in Panama's HRH field is the Gorgas Memorial Institute for Health Studies (ICGES), which is smaller institution than the Ministry and CSS and is exclusively focused on research in health field and in serving as the Central Reference Laboratory (World Bank 2014). ICGES has its own incentive system whereby staff is paid up to 60 percent of its base salary for participating in research projects financed with external funds.⁶

Further analysis is needed in Peru to assess the role that incentives can play in attracting and retaining HRH in the public sector and in rural areas. Surveys have shown that doctors are five times more apt to choose an urban post than one in a rural community. Salary increases and bonus points towards specialization would act as incentives in choosing a rural area, whereas increasing the number of years necessary to obtain a permanent post would act as a disincentive. Integrating health professionals to the public sector would require developing incentives and retention packages.

In Uruguay, incentives for health workers are mainly intended to align public sector salary levels with those in the private sector. Incentives are mainly used by the support commissions of the implementing units (Comisiones de Apoyo de las Unidades Ejecutoras) to align salary levels of health professionals in the public sector with those in the private sector. As such, they are not really "incentives," as they do not reward any special role or performance. As a result, different groups of physicians receive monthly payments for services provided in the executing unit. These physicians may have worked for the ASSE as staff physicians or *locum tenens* physicians who, in addition to the corresponding remuneration received (salary), also receive additional sums as "incentives." Box 3.1 has further details on how salaries for physicians are determined in Uruguay. However, some physicians are not associated with the ASSE under any of the arrangements. These physicians are only associated with the implementing unit through a contract with the support commission and receive the "incentive" as the only form of remuneration. In both cases, there is an employment relationship. Another incentive is the total geographic dedication scheme (Dedicación Total Geográfica, DTG for its Spanish acronym), which aims to encourage health workers to undertake assignments requiring relocation. Uruguay's public sector legislation has very limited number of incentives.

Box 3.1 How Are Physician Salaries Determined in Uruguay's Private Sector?

Uruguay's private sector has an established mechanism for salary negotiations for health sector professionals, whereby collective bargaining has been used since 1943. Salary boards were established and charged with determining the minimum salaries for each category of workers and updating compensation for all private sector workers. Salary boards also define the working conditions agreed upon by the delegates representing the employers and workers from the respective salary group. Decisions made by the salary boards take effect in the relevant activity group once they have been recorded and published by the Executive Branch.

A three-party committee comprising delegates from the Government, the main organizations that represent workers, and the main organizations that represent employers was established to negotiate salaries. Salary boards can be officially convened by the Executive Branch at any time, or whenever there is a request from the organization representing the relevant sector within two weeks of submission of the request. The Executive Branch directly appoints the delegates representing the workers and employers to the various groups that have been established, as agreed with the main employer and employee organizations.

The salary board established for the health sector is as follows: Group 15—Health and related services: this group comprises hospitals; sanatoriums; collective medical care institutions (mutual benefit societies; medical cooperatives and health centers for associations or unions); private medical care institutions with partial or full coverage; clinical analysis laboratories; clinics for diagnostic techniques; medical clinics; dialysis; ambulatory emergency services; training centers; caregiver services; nursing homes; residential homes for the elderly; fitness clinics that provide medical and paramedical services; and dental services (including machinery, dental prosthesis, and dental clinics).

To define the salary structure and compensation for physicians in the private sector (IAMCs), various organizations agreed on the salary scale tables to be used. These organizations represent different areas of operation of private physicians and include the Uruguay Medical Union (Sindicato Médico del Uruguay, SMU), the Medical Federation of the Interior (Federación Médica del Interior, FEMI), and the Anesthetic-Surgical Society (Mesa de Sociedades Anestésico-Quirúrgicas, SAQ). It is important to point out that these institutions determine the values of these tables in specific institutional contexts.

The Uruguay Medical Union scale is applicable to physicians from the Health Care Center of the Medical Union of Uruguay (Centro Asistencial del Sindicato Médico del Uruguay, CASMU), the IAMC with the second largest membership (as of September 2011, 10.5 percent of total IAMC membership), and owned by SMU's physician members. The Medical Federation of the Interior scale is determined on the basis of an agreement between rural insurers, and is unique in that physicians are partners or members of these entities. With respect to cases related to anesthesia and surgical specialties, the scale was created on the basis of an agreement reached by the Anesthetic-Surgical Society, and it pertains to professionals from all health care entities in all IAMCs.

Source: Gosis, López, and Perazzo n.d.

Notes

1. According to an April 2011 internal document from Panama, “Strengthening the Performance of Basic Health Services,” in 2009, the CSS had 2,754,761 beneficiaries, out of a population of 3.4 million people.
2. The EBAIS constitute the first level of health care in the country. These clinics care for a local catchment population and are staffed, at a minimum, by a physician a nurse, and a primary-health-care technician.
3. SERUMS, which provides health services in rural and urban-marginal areas, is a requirement for health professionals if they wish to be considered for later public health sector employment.
4. Registered nurses may opt for the full-time system based on the applicable provisions—the 15 percent mentioned earlier plus the percentage granted for this category may never exceed the maximum percentage set for full-time employment at the institution in question.
5. Board Resolution N° 46,616-2012-J.D., whereby salary premiums are to be granted to staff who work in difficult-to-reach areas and who do not regularly live in those areas.
6. Management Board Directive 07 of 2012, which nullifies Management Board Resolución No. 013 of 20 October 2009 and establishes the new regulations for the Incentive Plan for Scientific and Technological Research of the Gorgas Memorial Institute for Health Studies.

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Organization of the Health Workforce

Introduction

The organization of the health workforce is critical to how human resources for health (HRH) function within a health system and, in turn, how they contribute to make the system operate optimally and equitably. This chapter will explore important factors for the organization of the health workforce, such as skill mix, training, and distribution.

Skill Mix

Key Messages

- All six countries under study, except Peru, have achieved the World Health Organization's (WHO) HRH density target of 25 health professionals per 10,000 population.
- In Colombia, the country's health workforce is made up of at least 40 percent primary care physicians. Costa Rica, Peru, and Uruguay are significantly advancing in this area, while Jamaica continues to face challenges due to lower salary levels at the primary care level.
- Costa Rica's and Jamaica's primary health care teams have a wide range of skills for improving access to health care for vulnerable groups; in Panama and Peru, despite the fact that primary health care (PHC) has been articulated in the model of care (Panama) and through mobile brigades (Peru), there is a lack of PHC focus on the ground.
- Colombia, Costa Rica, Jamaica, and Peru have all achieved the WHO's minimum 1:1 nurse-to-physician ratio.
- All six focus countries have established an HRH planning unit to help address issues related to skill-mix imbalance.

The Mix

The skill mix of a country's health workforce significantly affects the delivery of health care services. An optimal skill mix results from having health workers produce a given level of health care services, of a given quality, at the lowest cost. In many countries, limited and expensive skills of more specialized professionals are not well matched to the local health needs profile (WHO 2006). When the local health care needs are not matched with the needed skill mix, health care services become less accessible and can become less affordable (Fulton and others 2011).

A minimum density of 25 health professionals per 10,000 population¹ must be achieved in order to allow for the proper delivery of health services. All focus countries, with the exception of Peru, appear to have met that target (table 4.1). The Jamaica country case study revealed a density of 19 nurses and midwives per 10,000 population, which exceeds the WHO's HRH target (table 4.1). Peru, the only country of the six that did not reach the target, only reached an HRH density of 23.1 per 10,000 population. Despite the overall promising results as a region, there is room for improvement when it comes to better balancing the skill mix. This is particularly the case as relates to the availability of PHC providers and the ratios across health professional cadres.

Colombia is the only focus country to have PHC physicians accounting for 40 percent of the country's health workforce. This is partly due to the fact that Colombia established a mandatory social service (Servicio Social Obligatorio, SSO) in 2007, which requires recent graduates in the fields of medicine, dentistry, nursing, and bacteriology to fulfill a social commitment before practicing their professions. Uruguay has made progress in this area; municipal governments (*intendencias*) have developed health programs that target low-income populations, offering PHC through neighborhood polyclinics and developing health prevention programs in coordination with the Ministry of Health. Available data for Peru and Costa Rica show that these two countries are advancing on this front, while more work is needed in Panama. In Jamaica, even though no specific data are available on physicians because the case study focused on nurses, the study nonetheless shows significant disparities between the salaries earned by nursing and midwife professionals in secondary and primary care levels, which discourage health professionals from working at the primary care level.

Table 4.1 Numbers of Health Professionals per 10,000 Population,^a by Category, Colombia, Costa Rica, Jamaica, Panama, Peru, and Uruguay, 2013

HRH density	Colombia	Costa Rica	Jamaica	Panama	Peru	Uruguay
Physicians/10,000 population	14.7	13.2	4.1	15.9	9.2	37.4
Nurses and midwives/10,000 population	6.2	9.3	19 ^a	13.6	12.7	55.5
Total	30.1	27.5	26	65.6	23.1	99.9

Source: WHO 2013.

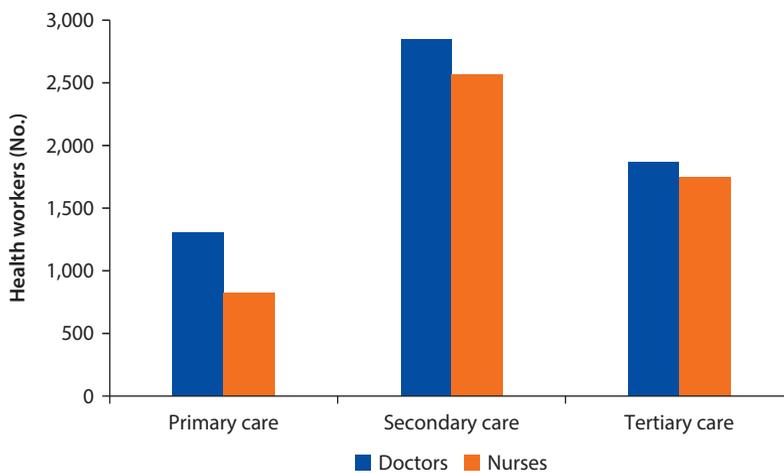
Note: HRH = human resources for health.

a. These figures came from the country case studies that are detailed in this publication.

Costa Rica and Jamaica have made the most progress of the six countries in setting up PHC teams with a wide range of skills, including community health workers, to improve access to health care and reach to vulnerable groups. Costa Rica, through its 1992–93 health reform, strengthened the decision-making capacity at the PHC level by including a medical doctor in the Basic Health team for Integrated Health Care (EBAIS for its Spanish acronym). The EBAIS now includes a medical doctor, a nursing assistant, and a technical assistant in public health care, as well as the support of a nurse, social worker, nutritionist, pharmacist, microbiologist, and medical records keeper. In Jamaica, despite the lack of available data specific to the target goal, the case study reveals that to alleviate the shortage of nurses and doctors in primary care, the government undertook initiatives to recruit more doctors and nurses from Cuba under a special government-to-government agreement. This is in keeping with the renewal of PHC strategy and the strengthening of primary health care teams countrywide. Jamaica has also initiated a strategy to link community health workers with the national health system; to improve access through the use of smartphones; to enable real-time surveillance of diseases, maternal and infant health, online training, management of the supply chain; and to capture significant health and epidemiological events.

A closer look at Panama and Peru shows that the skill mix of the primary health care teams needs to be strengthened. Figure 4.1 shows that the majority of doctors and nurses in Panama work in secondary care, while the primary care level employs the lowest number of these health workers of all three levels. This is contrary to the proposed community care model and the plan for strengthening PHC approved by Panama’s Social Security Institute. Peru has established mobile brigades, called ELITES, which are composed of doctors, nurses, and other professionals and are designed to improve access for vulnerable groups in remote areas. In addition, in rural and poor urban areas, health promoters

Figure 4.1 Distribution of Doctors and Nurses, by Level of Care, Panama, 2014



Source: Postigo 2014.

conduct community outreach and provide health education and minor health services (Francke 2013). However, further analysis of the competency profiles demonstrate that further emphasis needs to be given to primary health care skills. Peru's National Medical Residency Committee (CONAREME), which regulates the training of medical specialists in Peru, developed competency profiles for each specialty. The profiles of the priority specialties were analyzed to assess the focus or priority given to the primary care level. The result of this analysis shows that only the gynecology and obstetrics, and family and community medicine, place a priority on primary or community care. The conclusion can be drawn that in Peru, pediatricians, surgeons, internists, and anesthesiologists are not trained with a focus on primary care (Jiménez and others 2015).

To ensure the proper competency of health care teams, countries should have a minimum skill mix and ratio of one qualified nurse per qualified doctor. While the minimum ratio of nurses to physicians has been set at 1:1, in the primary health care context it should be higher. Our review found that Colombia, Costa Rica, Jamaica, and Peru had reached the set minimum nurse-to-physician ratio (PAHO 2011). Colombia has more physicians than nurses in the workforce, despite the fact that the ratio of physicians to nurses dropped from 2.3 physicians to 1 nurse in 2000 to 1.8 to 1 in 2010. According to data from Costa Rica's Social Security Fund (CCSS), there are 1.28 nurse aides and 0.57 qualified nurses for every physician in the country. In Jamaica, there are more nurses and midwives than doctors, for a ratio of 2.3:1 (PAHO 2011); nurses and midwives account for 40–60 percent of the country's HRH (Wilks and others 2009). In Panama, the nurse-to-physician ratio of 0.85:1 falls below the target goal. Moreover, this ratio varies across urban and rural areas, which is reflected in a higher ratio in rural areas (1.15) than in urban areas (0.85).

All six focus countries have established HRH planning units to help them address key issues such as the health workforce's skill mix and balance. Of the six, Uruguay's and Jamaica's planning units are fully capable to assess all areas. Both of these countries' planning units are well positioned within the ministry of health's hierarchical level, have a national-level scope of operations, and have decision-making authority to establish the types of HRH required. As such, they fulfill a steering role; use existing information and data to inform HRH decisions; and coordinate with other sectors, primarily education. Colombia's market-based health system links institutions across different markets to make decisions based on HRH education, the labor market, and conditions of the health service market itself. In Costa Rica, the CCSS has autonomy over HRH decisions, but unresolved issues remain.

A remaining challenge is that Ministry of Health administrators have not yet analyzed or made decisions regarding the country's HRH; they have not even indicated whether the Ministry has the capacity to do so. This inaction hinders the necessary monitoring and supervision required to ensure an effective HRH performance. In Panama, despite the fact that the Ministry of Health and the Social Security Fund (CSS) are beginning to move towards harmonization, each institution still has its own HRH policy-making authority. In Peru, HRH

decisions are made by the Ministry of Health's General Directorate for the Management of Human Resource Development.

Training of Health Care Providers

Key Messages

- All focus countries have acknowledged the need to strengthen their primary health care focus, but only Uruguay has reoriented the education at their health sciences schools to this end.
- All six countries are making health education more accessible to the population by increasing the number of specialties (Uruguay), increasing the number of training institutions offering health programs (Colombia, Peru), or facilitating the placement of graduates (Jamaica). The absorption capacity for graduates completing health training programs remains limited, however.
- High salaries for health professionals in Costa Rica has helped to achieve an attrition rate of 20 percent; the disparity in compensation between the first and second level of care in Jamaica has contributed to high levels of attrition.
- In Panama and Uruguay, 70 percent of health sciences and public health schools have been accredited; in Peru, the accreditation process has just begun; and in Colombia, Costa Rica, and Jamaica, accreditation remains voluntary.

Training

The education and training of health workers is a critical and urgent element of HRH planning and development. Clearly, more professional health workers are needed, but the solution is not a matter of generating more of the same. Efforts to scale up educational programs to produce more doctors, nurses, midwives, and other health professionals must increase not only the quantity of these health workers, but also their quality and their relevance to the population's future needs. The current shortage of professional health workers is compounded by the fact that these workers' skills, competencies, clinical experience, and expectations are often poorly matched with the health needs of much of the population they serve (WHO and PEPFAR 2011).

Insufficient collaboration between the health and education sectors often results in a mismatch of skills and needs. Weak links between educational institutions and the health systems that employ their graduates often result in a mismatch between professional education and the realities of health service delivery. These factors limit the capacity of even highly-qualified personnel to improve health outcomes. Educational institutions need to increase capacity and reform recruitment, teaching methods, and curricula in order to improve the quality and the social accountability of graduates (WHO and PEPFAR 2011).

Primary Health Care (PHC) Focus

Of the six countries studied, Uruguay had made the most progress in reorienting the education offered at its health sciences schools towards PHC. Uruguay has

three HRH training institutions² that do not center the training of HRH on the biomedical model, but instead include PHC content in the curriculum; they also have changed their curricular model, reorienting it to PHC. Panama has six universities that train doctors³ and five that train nurses.⁴ The country has embarked on a plan (Modernization Plan for PHC) designed to realign service networks to PHC and provide primary health care centers with technical and administrative management support. To help improve HRH planning, the country also conducted a needs assessment exercise with the universities that also considered the needs of the private sector.⁵

Peru's Ministry of Health introduced the rural and urban-marginal health service (SERUMS for its Spanish acronym) approach, which requires recent graduates in health sciences to work one year at the primary care level in rural or urban marginalized areas. Some nursing training programs in Peru also include a community focus, but none do so exclusively. San Juan Bautista University does emphasize community care in its nursing educational profile and includes courses and internships focused on community care.

Despite the fact that the countries have recognized the importance of PHC, existing structural issues continue to deter students from entering a career focused on PHC. In Peru, the gap between the available HRH professionals and the Ministry of Health's human-resource needs remains, reflecting that not enough graduating professionals have been being trained to work at the PHC level. In Colombia, the deregulation process has resulted in a proliferation of medical specialists, with the country now having some 200 specialties and subspecialties and with more institutions offering therapy programs. In Costa Rica, one of the criticisms of the country's HRH training is that the focus on biology training detracts from a broader professional concentration on health promotion and preventive care. Lastly, data from Jamaica's case study show that the disparities in compensation that favor secondary-level staff over primary-care staff act as a deterrent to working in PHC. Jamaica's enrolled assistant nurses receive only one allowance in primary care compared to their secondary-care counterparts, who qualify for seven, making primary-care nurses earn 53 percent less than their secondary-care counterparts.

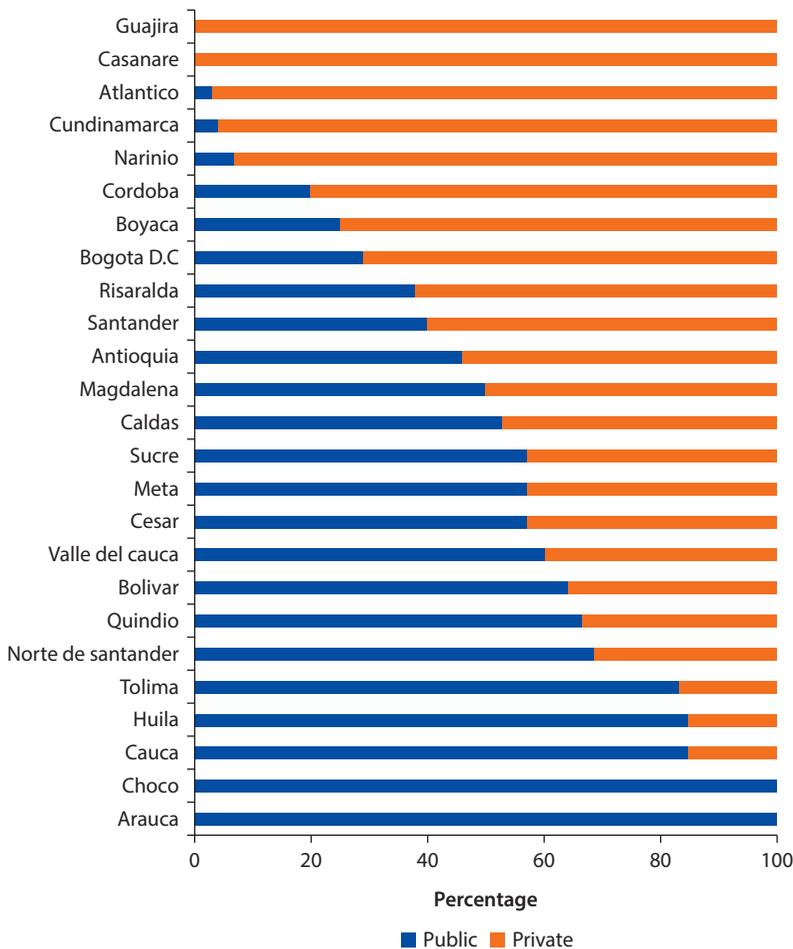
Access to Education in Health

The six focus countries are striving to make education in health more accessible by expanding educational programs and/or facilitating the placement of graduates. Uruguay, for example, has specific programs to recruit and train students from underserved populations. The country's highly specialized medical institutes (IMAE), which are public and private institutions financed by the National Health Fund (FONASA), have made it possible to have equitable access to more complex and technical specialties (Rey 2007). In Colombia, Law 30, enacted in 1992, triggered the broadest expansion of health education in the country by increasing access to health education programs. In 1974, Colombia had 44 higher education institutions that offered health programs (Cárdenas and Gutiérrez 2005); by 2011, 99 public and private institutions in

44 municipalities were offering undergraduate and graduate health programs (figure 4.2). As did Colombia, Peru also expanded its training programs for health professionals. According to Peru’s 2010 II National University Census (Peru, Instituto Nacional de Estadística e Informática 2011), in 1960, the country had only three medical schools and eight nursing schools; by 2011, there were 33 medical and 58 nursing schools.

A challenge in providing health services to poor, rural areas in Peru is being able to adapt them to different cultural norms; many of these areas have sizable Quechua, Aymara, and other indigenous populations. The state’s efforts to address this issue have been relatively few and limited to the southern highlands, where efforts have focused on increasing institutional deliveries (Francke 2013).

Figure 4.2 Undergraduate and Graduate Health Programs, by Municipality, Colombia, 2011



Source: Colombia, Ministerio de Educación Nacional, Sistema nacional de información de la educación superior—SNIES 2011, http://formularios.dane.gov.co/Anda_4_1/index.php/catalog/308/export.

In Jamaica, a manpower planner and training officer from the Ministry of Health meet with students during the final year of training before they take their university and regional exams, in order to facilitate their filling out employment applications. These are completed by most students, except those who have been sponsored directly by a private hospital. A placement system is used to distribute new nursing graduates throughout the country.

The absorption capacity for graduates of health training programs also is a challenge. As a way to improve human resources planning, Panama conducted its first needs assessment exercise with universities, which also examined the needs in the private sector.⁶ The Ministry of Health identified a growing need for specialists, which resulted in an increase from 40 positions in 2009 to 150 positions in 2014. In Costa Rica, out of 550 applications for admission submitted each year by health professionals graduating from training programs, only 100 openings can accommodate them in different career streams (medicine, dentistry, microbiology, pharmaceutical studies, nursing, and nutrition) (Vasquez and Borrell 2006). In Jamaica, 711 new nurses, 140 enrolled assistant nurses, and 58 midwives were employed in the public health sector between 2009 and 2011. During that same period, there were 200 such health workers who could not be absorbed because there were not enough funded posts. In Peru, according to information provided by the National Assembly of Rectors (Asamblea Nacional de Rectores), in the last years, only 20 percent of applicants to public university nursing programs are admitted, compared to 90 percent in private universities. Physicians' information is starker, with only 5 percent of applicants admitted to public universities, compared to 26 percent to private institutions.

Attrition

Of the six countries, only Costa Rica has nursing and medical school attrition rates that do not exceed the 20 percent target set for the countries of the Region of the Americas (PAHO 2011). Salary levels for health professionals in Costa Rica are above those of any other profession, which clearly contributes to the low attrition rate. A comparison of the country's physician's salary with other government jobs shows that the base salary (without salary supplements) of an attending physician (general) (G-1) is C764,345.00, while the salary of qualified individuals working in other areas is C562,375.83.⁷ These figures do not take into account the fact that public-sector salaries increase an average of 2.0 percent yearly, compared to an automatic 5.5 percent increase received by physicians, who, in addition, receive the public sector salary increase. In Jamaica, the compensation disparities in the public health sector between professionals working at the primary-care level and those at other levels contribute to the high attrition rates, especially among specialist nurses. Focus group discussions of nurses and midwives in all four of Jamaica's health regions confirmed that working conditions continue to be a major human resource concern affecting staff retention, absenteeism, and the attrition rate. In one of Jamaica's health regions, it was reported that the attrition rate was 8 percent. Dissatisfaction with working conditions was the main reason nurses gave for leaving the public

health system in Jamaica. In Uruguay, the ratio of graduates to enrolling students decreased in 1995–2005 from 0.46 to 0.33 (table 4.2), meaning that there are more students enrolling in health education programs than are graduating from them.

Accreditation

Accreditation—a critical aspect of the quality assurance process in health care—usually consists of a thorough review of the capabilities of an organization to consistently deliver reliable quality outputs or achieve desired results. It is typically applied to health institutions or facilities and not to individuals. In the past, accreditation mainly focused on the assessment of organizational inputs or processes, but over time, increasing attention is being paid to organizational outputs and outcomes. Accreditation procedures often promote a combination of assessments, including ongoing internal assessments conducted by the organization's staff and periodic external assessments conducted by an accrediting institution (Necochea 2006).

All six focus countries are advancing toward having health science and public health schools accredited by a recognized accreditation body. Since 2011, Panama's public and private universities have been undergoing an accreditation process.⁸ The Universidad Especializada de las Américas, the Universidad Latina, and the Universidad Latinoamericana de Ciencia y Tecnología have already been accredited, and the rest are being evaluated. In Peru, the Council for the Evaluation, Accreditation, and Certification of the Quality of Higher Education Programs (CONEAU for its Spanish acronym) is the governmental entity responsible for the accreditation of training and certification programs. Peru is working to regulate and ensure quality in university training, but the process has been slow. By July 2013, 45 universities had registered 143 training programs for HRH, but only 2 of them had finalized their accreditation (table 4.3).

In Colombia, Costa Rica, and Jamaica, accreditation is voluntary. Colombia has 1,555 accredited institutions⁹: 23 percent tertiary, 5 percent secondary, and 72 percent primary. The accreditation of institutions that provide health care is voluntary and is coordinated by the Colombian Institute of Technical Standards (ICONTEC) at the request of the Ministry of Health, which is part of the ICONTEC board of directors. The accreditation process is standards based and includes a self-assessment process and a visit from the accrediting

Table 4.2 Trend in the Ratio of Graduating Students to Enrolling Students in the School of Medicine, Uruguay, 1995–2005

	Year										
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Enrolling students	804	893	892	945	986	1,172	1,153	1,181	1,143	1,054	1,052
Graduates	369	373	332	280	357	400	402	406	371	288	349
Ratio graduates/enrolling students	0.46	0.42	0.37	0.3	0.36	0.34	0.35	0.34	0.32	0.27	0.33

Source: PAHO 2007.

Table 4.3 Number of Universities That Have Registered Career Programs with the Accreditation Council and Their Accreditation Status, Peru, 2014

<i>Career programs</i>	<i>Universities with registered career programs</i>	<i>Accreditation process initiated</i>	<i>Accreditation process finalized</i>
Medicine	21	17	0
Nursing	35	47	1
Obstetrics	18	17	0
Dentistry	22	27	1
Nutrition	10	9	0
Psychology	20	32	0
Pharmaceutical chemistry	10	10	0
Medical technologist	7	27	0

Source: Jiménez and others 2015.

agency, which makes its own assessment. Being accredited does not provide any additional advantage regarding perception of quality or any competitive advantage over nonaccredited entities. In Costa Rica, the National Accreditation System for Higher Education (SINAES) is responsible for conducting the evaluation based on established criteria and quality standards. Accreditation of a degree is voluntary; the university initiates the process and commits itself to complying with the principles governing SINAES. Then, the university can request to have various of its degrees submitted for accreditation.¹⁰ In Jamaica, midwifery, registered nursing, and enrolled nursing programs are accredited by the Nursing Council of Jamaica, which accredits schools of nursing, health facilities, and the curriculum used by the schools. Accreditation in Jamaica is also voluntary, promoting self-evaluation, self-regulation, and accountability. Accreditation in the country also can be granted by the University Council of Jamaica to schools of nursing that have been found, through self-study and peer review, to meet or exceed stated guidelines of educational quality. Box 4.1 has details on Colombia's and Costa Rica's accreditation efforts.

Distribution and Assignment of Health Care Providers

Key Messages

- With the exception of Jamaica, all focus countries have introduced programs to encourage rural or remote service; of those, only Peru has seen positive results, with an increase in health professionals working in remote areas in the past two years.
- Colombia and Panama have programs in place to ensure health workers public health and intercultural competencies; in Peru, a review of health competencies shows a lack of prioritization for community-level care.
- In Costa Rica and Jamaica, nurses confront barriers in being able to access further training opportunities to hone their skills.

Box 4.1 The HRH Accreditation Process in Colombia and Costa Rica

Colombia. The regulatory structure for higher education in health is coordinated by the National Ministry of Education, which has two regulatory bodies: the National Council on Accreditation (CAN for its Spanish acronym), which evaluates institutions and programs that have requested a voluntary quality accreditation, and the National Commission for Quality Assurance in Higher Education (CONACES), which regulates the minimum mandatory requirements of programs (needed to obtain an official registration in the country). In exceptional instances, the Ministry of Health is involved in educational matters through the Intersectoral Commission on Human Resources for Health (CITHS), which is made up of the Deputy Minister of Health and the Deputy Minister of Higher Education. This body is responsible for regulating all the health programs that have a clinical component. The government has launched a quality accreditation process. The process has been difficult for most institutions, and at this writing, only 24 educational institutions had been accredited. Without any accreditation process for health professionals, the quality monitoring for human resources quality is limited. For professionals entering the country who were trained in foreign universities, this effort falls mainly on the Ministry of Education.

Costa Rica. The process comprises three steps: self-evaluation to determine the strengths and weaknesses of an awarded degree; external evaluation by three experts (one national and two international) from outside the academic institution, who conduct an analysis; and a decision for or against accreditation of the degree. The value-added to this process by the national accreditation system, SINAES, has been widely acknowledged. Receiving training at a university where SINAES has accredited the profession is considered to be a plus, in view of the fact that Article 4 of Law No. 8798 on “Strengthening the National Accreditation System for Higher Education (SINAES)” stipulates that the state and its institutions will seek to hire personnel who are graduates of officially accredited programs (Sáenz and others 2011). That said, although priority is given to hiring graduates from universities with accredited programs, particularly of public institutions, this is not mandatory, given that there is no clear-cut rule that prohibits hiring professionals from nonaccredited programs, particularly in the private sphere.

Sources: Ruíz and Puerto 2013; Sáenz 2013.

Costa Rica and Uruguay recruit at least 30 percent of health care workers in PHC settings from their own communities; in Colombia and Panama, only residents of certain remote areas are allowed to be hired or their hiring is prioritized, respectively.

The LAC region continues to grapple with the challenges from a major imbalance in the urban-rural distribution of the health workforce. Over the past 20 years, the population growth rate for many urban areas in the region has doubled over that of rural areas. Similarly, increases in the number of health care professionals has been concentrated in urban areas. As a result, rural communities continue to have very limited access to needed health care services, compared to their urban counterparts. Achieving a more equitable geographic distribution of

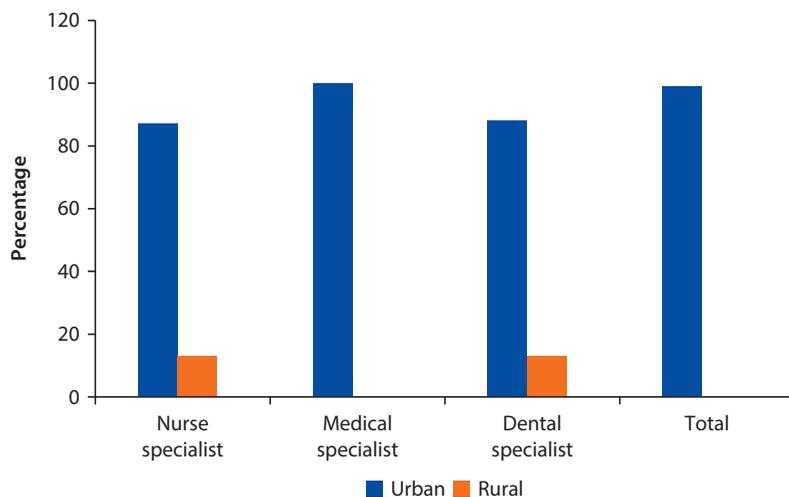
health professionals throughout the region would greatly enhance community access to health care services and contribute to improvements in health outcomes and the community's overall health status.

Incentives for Rural Service

In Colombia, the primary incentive for attracting health workers to rural or remote posts is the mandatory social service (SSO for its Spanish acronym). The SSO stipulates required time periods of service and remuneration scales according to conditions in each territory. In deprived urban or rural areas, or in remote areas without health services, institutions may offer incentives such as bonuses, prizes, and housing and food allowances to help draw HRH to these posts. To fill vacant posts in areas where there is violence, a shorter commitment period is an available option. Figure 4.3 illustrates the concentration of specialists in urban and rural areas in Colombia (only for municipalities with at least one health specialist).¹¹ According to this data from the Ministry of Health, there were no specialists in the departments of Amazonas, Guainía, Guaviare, Vaupés, and Vichada. According to the Colombia's National Statistics Department (DANE for its Spanish acronym), these are extremely rural regions with large indigenous populations. Of the country's 1,122 municipalities, only 14 percent have health specialists available.¹²

In Costa Rica, despite incentives offered by the health system to work in rural areas, staff are concentrated in the urban Central region. When the Ministry of Health was created during the "Integration and Transformation" period of the current health system (1923–86), disease prevention and health education coverage was expanded through mobile units and health care centers in rural areas. Articles 10 and 19 of Costa Rica's Law on Incentives stipulate that medical

Figure 4.3 Distribution of Health Specialists, by Urban and Rural Areas, Colombia, 2003



Source: Cendex figure, based on data from the Ministry of Health and Social Protection.

professionals of any category who provide services in zones 2, 3, or 4 (zones outside the Greater Metropolitan Area), based on the current Social Security Fund (CCSS) zoning regulations, or their equivalent in other institutions, will receive an incentive of 10, 12, and 14 percent, respectively, over the base salary for working in a rural area. This is a significant economic incentive in the context of human resource distribution. Notwithstanding, professionals continue to concentrate in central region clinics and hospitals, and patients from remote areas must travel to receive specialized medical care.

Neither Jamaica nor Panama have any programs to encourage rural service, or what program is in place is not yielding expected results. Jamaica once had a rural incentive allowance, but it no longer exists. Beyond placing nurses according to need, there are no special incentives for nurses who opt to work in rural areas. In Panama, only 11.6 percent of doctors and 15.7 percent of nurses serve in the country's rural areas,¹³ despite the fact that rural populations account for 35 percent of the total population (Panama, Contraloría General de la República 2013). While a doctor has a potential catchment population of 422 patients in the province of Panama, this figure increases to 1,293 in the province of Bocas del Toro, and is as high as 7,125 in the indigenous area of Ngäbe-Buglé (Postigo 2014). This deep disparity in the distribution of health professionals between rural and urban areas is accentuated in the HRH density by province (table 4.4). While provinces such as Los Santos and Herrera have an HRH density level above 35.0 and the province of Panama nears this, Ngäbe Buglé has an HRH density of only 2.6, Darién of 12.2, and the indigenous area of Guna Yala only of 13.0. The lack of specialists in rural and hard-to-reach areas led the government to issue Law 69 in 2013,¹⁴ which deals with the hiring of foreign medical specialists. This law was met by a national strike by the medical union, which led to its modification that included setting time limits on the hiring of foreign medical specialists

Table 4.4 HRH Density (Doctors Plus Nurses per 10,000 Population), by Province, Panama, 2001–11

<i>Province</i>	<i>2001</i>	<i>2006</i>	<i>2011</i>
Bocas del Toro	21.2	18.1	17.1
Coclé	12.7	16.6	21.0
Colón	17.0	16.4	16.1
Chiriquí	20.6	24.3	27.2
Darién	13.6	14.1	12.2
Herrera	27.7	32.5	37.8
Los Santos	22.4	29.7	38.3
Panamá	32.3	32.0	34.0
Veraguas	13.8	17.1	20.2
Guna Yala	10.9	9.0	13.0
Ngäbe Buglé	0.8	1.8	2.6
Nationwide	24.3	25.6	27.6

Source: Panama, Ministerio de Salud 2013.

Note: HRH = human resources for health.

Peru's strategy to attract health professionals to rural areas is being successful. As a way to expand primary health care coverage, the Ministry of Health relies on its rural and urban-marginal health service (SERUMS); through SERUMS, health professionals spend one year working at the primary care level in rural and marginalized areas. Health professionals must fulfill their SERUMS requirement if they want to work in the public sector later on. In 2009, SERUMS was restructured, whereby poverty maps developed by the Social Compensation and Development Fund (Fondo de Compensación Social y Desarrollo, or FONCODES) were used to identify and prioritize the poorer districts where SERUMS posts would be created (Peru, Ministerio de Salud 2011). Data from 2011 shows that this restructure has effectively increased the presence of health professionals in more remote and less privileged areas. In 2008, only 50 percent of Peru's poorest districts had a SERUMS doctor, but by 2011, 89 percent of these districts had one. Furthermore, in the country's three poorer departments, the presence of a doctor increased significantly, to 95 percent of the districts in Ayacucho, 97 percent in Apurímac, and 95 percent in Huancavelica (Jiménez and others 2015).

Public Health and Intercultural Competencies

Colombia's SSO is helping the country increase the number of primary health care workers that have public health and comparable intercultural competencies. SSO was established in 2007 through Law 1164, which made it obligatory for recent health-program graduates to comply with this service. The idea is that these professionals, in complying with their SSO, would respond to health problems with their professional expertise, but also through a social commitment. The SSO benefits not only the population being served, but also the health professionals themselves. As inexperienced professionals, these recent graduates receive hands-on experience in response to the needs of the population and the health system. Satisfactory completion of the SSO commitment entitles the graduate to practice his or her profession. A graduate student needs only to serve once in the SSO, upon obtaining his or her professional degree in medicine, dentistry, nursing, or bacteriology. In Colombia, all primary care HRH are usually SSO personnel. The SSO personnel in Colombia typically are employed in small health centers or facilities and in outpatient services at public hospitals; they also may work night shifts in small municipalities or remote areas with poor service coverage.

Panama's extension coverage strategy (EEC for its Spanish acronym) is a basic package of priority health services for the population that is focused on PHC. The basic package includes 15 health services in the areas of health promotion and disease prevention that are targeted to the poor living in rural and marginalized areas. Health service delivery is carried out through two modalities—mobile health teams and community health teams. Mobile health teams are made up of a doctor, a nurse, a nursing technician, a nutritionist, and an environmental health technician or health educator. Community health teams are comprised of health promoters, midwives, social auditors, monitors, and health committee members.

Both sets of teams have well-developed intercultural competencies, are highly sensitized to the local context, and focus their care on particular rural poor or indigenous communities that they get to know well over time. Intercultural competencies are a particular asset of the community health teams, in that they include health professionals with local knowledge, such as promoters, midwives, and health committee members.

In Peru, the Ministry of Health competency profiles are not filling the primary level of care needs. In Peru, there are no competencies related to prevention, promotion, and management in every HRH career, except for a few in the nursing field that deal with adult care related to tuberculosis and HIV/AIDS. Doctors must carry the full load of competencies related to noncommunicable diseases (NCDs). This approach runs the risk of leaving many people who begin to show signs of NCDs without PHC, precisely where it is critical to begin implementing lifestyle changes (diet, exercise) that may stem the progress towards NCD-related illnesses. These competencies were examined in the case studies, to explore how much focus is being given to developing competencies linked to providing care at the primary care level; starting at level I-2, it is possible to already have a specialized physician, and beginning at level I-4, specialized physicians are the standard. Results show that the only specialties that include competencies related to community level of care are gynecology and obstetrics, and family and community medicine.

Skills Development for Nurses, Nursing Assistants, Health Technicians, and Community Health Workers

In Costa Rica and Jamaica, nurses experience barriers in access to further training opportunities. Many nurses in Costa Rica, for example, work under unfavorable hiring conditions and continuing-education opportunities. Since the Center for Strategic Development and Information on Health and Social Security (Centro de Desarrollo Estratégico en Salud y Seguridad Social, or CENDEISSS) is producing fewer nurse aides, “the CCSS has maintained a policy of freezing professional positions and keeping open positions for technical employees (nurse aides) which are, for the most part, filled with qualified nurses” (Sáenz 2013). This policy means that overqualified professionals are working for salaries below their skill levels. Furthermore, opportunities for study grants and time off to study are more limited than they are for other professionals; furthermore, in many cases, the CCSS does not recognize the Master’s degrees of qualified nurses. With respect to the appeal of management positions, these professions are being rejected in the nursing profession because of “the ongoing threat, at both the national and public institutional level, of the closing or restructuring of management positions in the field of nursing” (Ruíz and Puerto 2013). In Jamaica over the past four years, the training of registered nurses and enrolled assistant nurses, as well as post graduate nursing courses such as advanced practice nursing have been transferred to the Ministry of Education. To date, the Ministry of Health has only retained the midwifery program and some in-service programs. This transfer limits nurses’ pursuit of further studies, as the nurses themselves are now

expected to cover the cost of their studies, with the government providing only a few scholarships supported by training grants from the National Health Fund and the CHASE Fund.¹⁵

Recruitment of Health Care Workers from Their Own Communities

Health care workers who are recruited from their own communities are more likely to return and remain there to work after completing their training. Local recruitment further enhances the strength of the primary health care team by enlisting those that already have the requisite cultural sensitivity and knowledge of the community's networks, contacts and needs. In Peru, regional governments play an important role in deciding, with guidance from the General Directorate for the Management of Human Resource Development (DGGDRRHH for its Spanish acronym), how health workers hired through SERUMS will be distributed at the provincial levels and in advocating for converting SERUMS positions into permanent posts. In Colombia, in areas such as San Andrés and Providencia, patronage has a role in the hiring of nurses, as only persons born on the island can be hired. In Panama, the Social Security Fund (CSS) makes it a priority to hire health workers who are residents of a given region; if this is not possible, the health worker is assigned to the area with the greatest need.

Notes

1. This ratio was set as a goal for the countries of the Americas by the Pan American Health Organization and the Regional Office for the Americas of the World Health Organization.
2. Universidad de la Republica (public), Universidad Catolica del Uruguay (private), and the Centro Latinoamericano de Economía Humana (private).
3. Two are public—la Universidad de Panamá and the Universidad Autónoma de Chiriquí (UNACHI); four are private—Universidad Latina, Universidad Latinoamericana de Ciencia y Tecnología (ULACIT), Columbus University, and Universidad Americana (UAM).
4. Universidad de Panamá, Universidad Autónoma de Chiriquí (UNACHI), Universidad Latinoamericana de Ciencia y Tecnología (ULACIT), Universidad Especializada de las Américas (UDELAS), and Universidad Latina.
5. Researchers received verbal information about the recent creation of a commission designed to conduct detailed planning of human resource needs; the commission was made up of the Ministry of Health, the Social Security Fund, the Universidad de Panamá, the Medical Association, and civil society, and was coordinated by Dr. Zelibeth Valverde, Ministry of Health Director of Planning. It was not possible to verify this in writing.
6. Researchers received verbal information about the recent creation of a commission designed to conduct detailed planning of human resource needs; the commission was made up of the Ministry of Health, the Social Security Fund, the Universidad de Panamá, the Medical Association, and civil society, and was coordinated by Dr. Zelibeth Valverde, Ministry of Health Director of Planning. It was not possible to verify this in writing.
7. These are 2013 figures from Costa Rica's Ministry of Labor and Social Security.

8. Law 30 was enacted on July 20, 2006; it established the National Council of University Evaluation and Accreditation of Panama (Consejo Nacional de Evaluación y Acreditación Universitaria de Panamá), which coordinated the process.
9. These are authorized institutions that have already gone through the accreditation process.
10. See SINAES (El Sistema Nacional de Acreditación de la Educación Superior), “Acreditación de carreras universitarias: El proceso,” <http://www.sinaes.ac.cr/index.php/el-proceso>.
11. According to the Ministry of Health’s database, in Colombia, 161 municipalities (out of a total of 1,122) have at least one health specialist.
12. According to the World Bank’s Colombia HRH case study, some 82 percent of the country’s population lives in these 161 municipalities.
13. Based on 2012 data from the National Institute of Statistics and Census (Instituto Nacional de Estadística y Censo, INEC for its Spanish acronym) on the distribution of doctors by region, specialization, and sex.
14. Law 69, of 2 October 2013, authorizes the Ministry of Health and the Social Security Fund to hire foreign professionals and health technicians on a temporary basis.
15. The Culture, Health, Arts, Sports, and Education (CHASE) Fund was incorporated in 2002 and began to function in 2003. It receives, distributes, administers, and manages monetary contributions from the lottery companies in connection with sports development, early childhood education, health, arts, and culture.

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Management of the Health Workforce

Key Messages

- As Members States of the World Health Organization (WHO), all six focus countries have voluntarily adopted the WHO Global Code of Practice on the International Recruitment of Health Personnel.
- The number of foreign-trained specialists are increasing in the Latin America and Caribbean region due to new migratory patterns, as in Colombia, with increasing health professionals from the República Bolivariana de Venezuela and Cuba, and in Costa Rica, Jamaica, and Panama, who are hiring foreign health professionals as a temporary fix to health personnel shortages.
- The region is also losing health professionals to outmigration: Peru accounts for 44.7 percent of all migrations in the region; health professionals in Jamaica and Peru have a great desire to leave their countries.
- The six focus countries are struggling to put in place self-sufficiency policies to meet human resources for health (HRH) needs. The lack of promotion plans, limited nonmonetary incentives, and the shortage of personnel for recruitment and eventual placement are challenges they all face.
- Colombia, Costa Rica, Peru, and Uruguay have developed mechanisms for certifying foreign-trained professionals through degree validation and have facilitated formal hiring processes to help them fill the health-worker distribution gaps in rural, remote areas.

The outmigration of health workers significantly contributes to the deficit of health personnel worldwide, but it is felt particularly in developing countries. A global shortage of health workers and the increasing demand for health workers, especially from higher income countries, act as pull factors that encourage health worker migration. In addition, such push factors as low salaries, lack of incentives, and lack of career development opportunities encourage health workers from developing countries to consider migrating out of their home countries in search of better work opportunities. The challenge is balancing the

right of health workers to freedom of movement while ensuring that countries have the capacity to deliver health services to their population. The WHO advocates an international code of practice for the international recruitment and management of health personnel. Developed countries are encouraged to adopt binding codes of conduct governing ethical recruitment practices as a way to compensate those countries where health professionals are being recruited from and to commit themselves to following official policies of health workforce self-sufficiency at the country level.

Managing Migration

The WHO's Code of Practice on the International Recruitment of Health Personnel—which all six countries have adopted as member states—aims to establish and promote voluntary principles and practices for the ethical international recruitment of HRH. Member states are discouraged from actively recruiting staff from low- and middle-income countries that are facing critical shortages of health workers.

No estimate has yet been calculated on the proportion of foreign-trained specialists that leave Colombia, but it is known that the numbers are on the rise. In 2000, an estimated 5.7 percent of physicians trained in the country emigrated (Bhargava, Docquier, and Moullan 2010). Furthermore, a large number of Colombian nurses left for countries including Chile, Italy, Spain, and the United States. In the aftermath of Europe's economic crisis, however, many nurses returned; during periods of personnel cuts, foreigners are the first to be pushed out to protect the jobs of national workers.¹ According to the National Commission for Quality Assurance in Higher Education (CONACES), the growing number of health workers hired in other countries stems from several concurrent phenomena: first, an increase in the number of general-medicine graduates without a commensurate increase in the number of residency positions; second, a new migratory pattern of foreign physicians entering Colombia, particularly Cuban and Venezuelan professionals on medical missions.

Panama and Costa Rica have authorized foreign health professionals to work in their countries as a way to temporarily address personnel shortages. In Panama, the Ministry of Health and the Social Security Fund (CSS) are authorized to hire foreign health professionals and technicians on a temporary basis. Foreign physicians have been authorized to work in Costa Rica to help provide care in provinces outside the Greater Metropolitan Area. Despite a zoning incentive paid over the base salary in Costa Rica, health professionals tend to concentrate in the Greater Metropolitan Area. This situation has forced the country's College of Physicians and Surgeons to authorize foreign physicians to work in outlying provinces where Costa Rican physicians prefer not to work (Castillo 2012).

Even before adopting the WHO's Code of Practice on the International Recruitment of Health Personnel, Jamaica had already entered into bilateral agreements with Cuba and Nigeria for the supply of nurses. To date, 49 percent of nurses recruited from Cuba are specialist nurses. The recruitment of

nonspecialist nurses from Cuba is of concern for the Nurses Association of Jamaica, given the oversupply of level-1 nurses and the lack of employment opportunities in the public health sector. Apart from these formal channels, the public health sector recruits nurses who apply from other countries and from the private sector, provided they meet the requirements of the hiring institution and the Nursing Council of Jamaica. Jamaica has tried to manage migration by implementing an economic bonding process. The Bonding Policy of the Government of Jamaica (established on January 1, 2009) states that, "Once an individual who receives an award begins the course of training, the cost of training is regarded as a loan and the individual as a borrower. This loan is to be discharged, in the first instance, through serving of a bond. The amount for which the borrower will be bonded covers the actual cost to Government of the training." The salaries for specialist nurses in Jamaica cannot compete with those of recipient countries, which is a reason given for migration (Kurowski and others 2012).

According to a 2013 report (PAHO 2013), Peru has the highest numbers of outmigrating doctors and nurses in the region, losing an average of 588 doctors and 881 nurses that together account for 44.7 percent of all migrations in the region. In Peru, the intention to migrate is high among health professionals, particularly among students, where it is at 78 percent. This figure is significantly higher than that reported by Mayta-Tristan and colleagues (2010) for 2008. In their study, a survey was administered to medical interns at the Universidad Nacional de San Marcos to assess their intention to migrate. Results show that 38.1 percent of the interns intended to migrate; of those, 70 percent planned to emigrate to Europe and 23 percent to the United States. One of the leading factors that feeds this intention is the improved economic conditions in the receiving countries.

Managing Self-Sufficiency to Meet Country HRH Needs

The six focus countries are struggling with putting self-sufficiency policies in place to meet HRH needs. Information gathered through the case studies is examined below, as a way to better understand the different strategies the countries are pursuing in this regard.

Promotion and Career Path

In Jamaica, nurses and midwives face many obstacles along their career paths. The highest position a nurse can attain in the public health sector is that of chief nursing officer. This is a position within the Ministry of Health that has responsibility for policy development, standard setting, and monitoring and evaluation of nursing services. While the career path for registered nurses is clear, those for midwives and enrolled assistant nurses are not. Nurses and midwives may opt for alternative positions within the health system, such as program development officers and surveillance officers within the Ministry of Health or as health managers within the Regional Health Authorities, if they have the requisite qualifications. However, several barriers remain to the successful pursuance of career

paths in nursing and midwifery, including a hierarchical system that limits how far someone can be promoted, the fact that nurses and midwives do not receive adequate guidance in defining personal career goals, and obstacles in accessing post-basic training, such as cost and time constraints. In addition, the shortage of specialist staff and the excessive staff rotation through the hospital system means that not enough time is spent developing specialty skills.

One of the biggest constraints on HRH development in Colombia is the lack of promotion plans, an issue that applies equally to both public administrators and health service personnel. While limited civil-service growth is a factor, the HRH contracting model also plays a role. As a result of labor flexibility, professional workers have little sense of belonging to the health service institutions where they work; most health professionals tend to develop their career independently, without integrating into these institutions. It should be noted that some institutions do have well-structured career plans, as do several of the more developed insurance providers, including Sura, Sanitas, and Aliansalud EPSs.

Nonmonetary Incentives

Colombia has restricted the use of incentives for hiring and training human resources, which has become a limiting factor in the government's decentralization strategy. In addition, evidence suggests that nurses who teach are better paid than nurses who provide health services, which creates incentives for nurses to opt for teaching positions that are better remunerated and where social security contributions from the employer are guaranteed. Additional elements affecting the quality of human resources educational processes in the country include the paltry budget and incentives destined for health services training and continuing education.

In Costa Rica, limited nonmonetary incentives available to health workers in the public sector are offset by those offered in private sector. Nonsalary incentives are available for public health professionals related to education and job performance (such as food, uniforms, housing, and legal defense), as well as social incentives. However, public-sector health workers face persistent limitations in such logistical systems as electronic filing, information technologies, and medium- and high-complexity hospital infrastructure. This situation is offset by the private sector, which offers not only salary incentives, but also better medical equipment, infrastructure, and technology, as well as greater job flexibility.

In Panama, the health sector does not provide nonsalary incentives. Only health personnel that carry out their functions in difficult to reach areas receive incentives in the form of housing and transportation.

Recruitment and Placement

Administrative requirements in Colombia are relatively demanding, and competitive recruitment strategies are frequently pursued by external entities (universities, human resource consultants). Recruitment at the managerial level in the public sector has a large patronage component that creates barriers to hiring the most suitable managers. This is also related to conditions in the

public sector that may lead to poor performance, particularly with regard to the work environment and lower wages and benefits (Chacón, Quiñones, and Vigoya 2004). According to the managers interviewed for this study, the greatest human resource problems stem from a shortage of qualified personnel for recruitment, as occurs in nursing and medical specialties. In most cities, while the availability of human resources is high, there is a paucity of medical specialists. Some rural areas also have low availability of doctors and nurses. The most recent human resources study found that despite the increase in number of medical schools, the rate of general practitioners who go on to specialize went from 1:3 to 1:5, indicating that the rate of creation of new specialty programs remains low.

In Jamaica, all nurses are expected to meet recruitment qualifications and registration requirements for any employment level within the public and private sectors, as defined by the policies of the Nursing Council of Jamaica. The exception are nurses from the CARICOM region, who are allowed free movement under the CARICOM Single Market Economy (CSME). A placement system is used to distribute new nursing graduates across the country. There is no difference in the recruitment procedures for nurses and midwives, regardless of whether employment is permanent or by contract. Nurses who are recruited from overseas are required by law to obtain a work permit. Employers facilitate obtaining the permit, which is given a recommendation by the Ministry of Health, and ultimately approved by the Ministry of Labor. Regardless of nationality, recruitment and placement are defined by the availability of posts and budgetary allocation to pay new recruits within the fiscal space allowed. Different criteria are used in the recruitment and selection process of nurses recruited at higher than entry level. It is important to consider other factors, such as post graduate training, track record, interpersonal skills, emotional intelligence, and personality psychometric testing, which is only done at the level of the Chief Nursing Officer.

Peru faces a countrywide health personnel deficit, estimated at 11,779 physicians, 8,780 nurses, 4,950 obstetricians, and 27,515 dentists. While the country's deficit of medical specialists has been well known, it has become more notorious within the context of universal health coverage. The resulting added demand for health services has occurred in parallel with an expansion of the sector's infrastructure and equipment, and a rise in internal and external migration. According to current available data, there are four areas that are particularly hard hit by the medical specialist shortage: obstetrics and gynecology, pediatrics, internal medicine, and general surgery. It would be extremely useful if the system were to analyze where this workforce is employed, what the work conditions are, and what the status of migration is. This information would allow for a better understanding of the incentives that are needed to absorb and maintain medical specialists where their services are needed.

The professional medical sector in Uruguay is the oldest in the country and accounts for the biggest share of the budget. The medical profession turns out the greatest number of postgraduates and has the highest number of instructors.

It is also the professional sector with the highest number of persons holding several jobs. Although percentagewise the population of physicians is one of the biggest in the world, levels of open unemployment are not very high.

Management of Foreign-Trained Professionals

Colombia is receiving a growing number of professionals who come from other countries, but many Colombian health professionals study abroad and validate their degrees when they return to the country. Degree validation is a relatively simple procedure among Latin American countries and from elsewhere in the world. The largest providers of education in the medical field are Argentina, Brazil, and Mexico; the largest providers of foreign workers are Cuba and República Bolivariana de Venezuela.

Because Costa Rica's physicians are concentrated in the Greater Metropolitan Area, some provincial levels are left with unmet needs. In an attempt to close this gap, the country has resorted to hiring foreign physicians.

In Jamaica, in addition to the formal channels of recruitment for international nurses, the public health sector also recruits nurses who apply voluntarily from other countries. The private sector also recruits from outside the country; all provided they meet the requirements of the institution and the Nursing Council of Jamaica.

The shortage of medical specialists in Panama's interior, including in difficult-to-reach areas, has led the government to regulate the hiring of foreign medical personnel through Law 69 of 2013 and Law 89 of 2013. These laws authorize the Ministry of Health and the Social Security Fund to hire health care professionals and technicians on a temporary basis. The influx of foreign-trained physicians resulting from these laws has also led to the implementation of the certification and re-certification program described earlier. The medical certification examination that emerged from this program is mandatory for all new physicians who want to practice medicine in the public and private sectors.

Note

1. Interview with the president of the National Association of Nurses of Colombia (professional nursing association).

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Regulation of the Health Workforce

Key Messages

- All countries are working to reduce precarious, unprotected employment of health service providers. Challenges remain, however: Costa Rica and Uruguay must cope with underemployment; in Jamaica and Peru, 19 percent of primary health care workers and 32 percent of all health workers are precariously employed.
- All six countries have or are continuing to develop health worker safety policies and programs to reduce occupational diseases and working accidents. Colombia is designing risk programs for work-related illnesses and accidents; Costa Rica and Jamaica are focusing on addressing the issue of safety for health workers; and Peru is developing guidelines and measures to provide health workers with satisfactory working conditions.
- In Peru and Uruguay, more than half of managers of health services meet competency requirements; in Panama and Peru, certification processes are being implemented and improved to strengthen the quality and uniformity of training of health professionals.
- All countries have some form of mechanism to mitigate or resolve disputes. Colombia and Jamaica both have legislation in place to regulate provider conduct, guide professional practice, and apply sanctions; in Jamaica and Uruguay, multiple actors participate in key negotiations.
- The experience of professional associations in Panama and Colombia reflect the important role these play in policy decisions and dialogue with the government; recent experience with unions, however, reflects fragmentation and division, which limits their ability to act.

Promoting safe and healthy working conditions for all health care providers is an important strategy for improving the population's health. Precariously employed workers, such as temporary employees, parttime workers, and workers at the low end of the pay scale and with uncertain prospects for the future, face high levels of job insecurity and frequent short-term employment. Insecure job conditions with injury risks, work overload, and workplace stress are also common in many

health delivery sectors. The reduction of precarious, unprotected employment for health service providers will enhance the long-term success of health workforce recruitment and retention strategies and increase the overall stability, manageability, and effectiveness of the health workforce.

Strategies to Address Precarious Employment

Working conditions present one of the most critical factors in HRH performance in Colombia. According to information from a focus group conducted as part of the case study, at the level of support personnel, low wages and salaries often force workers to accept double shifts in hospitals (given the high demand for this type of resource), which can be detrimental to productivity and to patient safety. According to the director of the country's nurses association, working conditions for nurses have deteriorated, largely due to outsourcing and contracts through cooperatives that, while bringing down employer costs, also decrease employee benefits. Through the cooperatives, employers contract nursing HRH based on the provision of services, so the employee is responsible for social security payments and wages are lower. For medical specialists, the excessive workload is caused by growing demand from hospitals, which leads to dual practice. Focus groups reported that this situation has led to an extremely long workday for medical specialists, who typically work in two or more institutions, performing an excessive number of procedures, to the detriment of patient safety. Residents face a similar situation, in that they are categorized as students and, as such, are not paid for their work. To earn enough income, residents often take rotations in different institutions other than where they are a resident, increasing their workloads.

In Costa Rica, nurses are the health care providers most affected by the challenges from unprotected employment. A clear example is the hiring of nurses as nurses aides by the Costa Rican Social Security Fund (CCSS), a practice that undermines the morale of qualified nurses. Although significant economic and noneconomic incentives are offered to physicians and nurses under applicable laws, nurses still face difficulties. Many work under unfavorable conditions in terms of hiring and opportunities for continuing education. In this regard, since the Center for Strategic Development and Information in Health and Social Security (CENDEISS) is producing fewer nurses aides, the CCSS has continued to pursue its policy of freezing professional positions and keeping open positions for technical employees (nurses aides); the latter are, for the most part, filled by qualified nurses. This means that overqualified professionals are working for salaries below their skill levels.

Jamaica classifies anyone employed on a temporary, contractual, or sessions-only basis as precariously employed. Available data from Ministry of Health staff listings and its 2010 employment census indicate that approximately 19 percent of primary health care workers were precariously employed. Among nurses and midwives, 33.8 percent are considered precariously employed, broken down as 29.0 percent under temporary contracts, 1.4 percent contractual, 3.0 percent

sessional, and 0.4 percent part-time. In addition, while the reemployment of retired nurses and midwives is helping to fill shortages, it also raises concerns about the security of tenure, as they account for 3 percent of those currently filling posts. On a positive side, the government subsidizes private health insurance for nurses and midwives.

Peru's contracting mechanism for the temporary hiring of health sector personnel has brought benefits to health workers, but it has created instability. Peru shifted all of its health workers that worked under nonpersonal services (Servicios No Personales, or SNP) contracts to the administrative contract of services (Contrato Administrativo de Servicios, or CAS) category. CAS was established in an effort to improve the contracting system by determining the duration, schedule, and activities to be delivered under the contract and providing social protection through EsSalud and contributions to the provisional system. Data on the current health human resource in the public sector and their contracting scheme shows that 32 percent works under the CAS scheme. However, the temporary character of these contracts creates instability for the workforce. In addition, health care workers with more recent, temporary contracts face a significant gap in earnings compared to those working under permanent contracts, with the latter receiving up to double the salary.

In Uruguay, a lack of full-time employment in the health sector generates under-employment. Employment strategies aim to fill a full work day by tasking the health worker with multiple roles and responsibilities. Engaging in more than one job is seen as a way to diversify the risk that accompanies instability from underemployment. Mobile emergency personnel also face a higher level of contracting precariousness compared to other areas of the health sector. In winter, mobile emergencies significantly increase the number of doctors they incorporate, which results in a highly seasonal, precarious, unprotected employment for them.

Regulating Health Safety

Colombia is designing risk programs for work-related illnesses and accidents, and Costa Rica and Jamaica are focused on addressing the issue of safety for health workers. In 1993, Colombia's Law 100 established a general professional risk system, managed by professional-risk administrative entities (Administradoras de Riesgos Profesionales, or ARPs for its Spanish acronym). To implement the legislation and protect workers, these organizations carry out interventions (preventive, curative, rehabilitative, and compensatory) dealing with the risks of work-related illnesses and accidents. ARPs help companies design risk programs and implement primary and secondary preventive measures against risks and professional disease. Costa Rica's health workers continue to concentrate in the Greater Metropolitan Area, a practice that may be attributable to, among other factors, better social and educational conditions for the professionals and their families, and a safer environment. In Jamaica, despite the fact that the government spends significant amounts to ensure the safety of health providers and

patients, there have been occasional safety breeches at facilities. Nurses have expressed the concern that there is nowhere safe and that safety provisions are limited, leading them to practice unhealthy lifestyles. Nurses also believe that child daycare facilities for working nurses and midwives should be part of welfare programs for nurses.

In Peru, guidelines and measures being developed for reforming the health sector include providing satisfactory work conditions for health workers that can help them to fulfill their duties more easily. The government, through the National Health Council, has begun implementing Supreme Resolution No. 001-2013-SA, which sets forth guidelines and measures for the health sector's reform. These include strengthening the Health Authority, encouraging health promotion, ensuring individual and family protection by extending existing health insurance to universal coverage, providing health workers with satisfactory work conditions, improving regulation and access to quality medicines, improving the use of human resources for health, and reducing individual spending while increasing public funding. Information on organizational climate within the public health sector from the Office of Quality within the Ministry of Health shows that the majority of health workers have expressed the need for improvements to their work environment. The information also highlights the need to improve the quality of information on human resources in subsectors outside the public health sector and conduct more research to inform policy development.

Addressing Competencies through Certification

Colombia's scientific societies have no certification process for human resources. Law 1164 of 2007, which was ultimately adopted by Congress, tried to institute such a process. The Constitutional Court declared it unconstitutional, however, on grounds that the legislation imposed restrictions on medical practice, thus infringing on the country's freedom of medical practice. Medical associations were set up to perform this function, but they have been unable to carry out their mission due to the legal vacuum. Thus, readiness for entry to the labor market comes solely from having received a university degree. Further, there are no clear rules for the retirement of professionals and other workers due to age or disability; the trend is for workers to work well into old age. A health worker works an average of 35 years under demanding conditions, including long work hours. The leadership in the Ministry of Health and the Ministry of Education believes that it is necessary to institute professional recertification processes to achieve the following two strategic objectives: to ensure the quality of human resources beyond the time of their initial certification upon completing their education; and to keep up-to-date information on training conditions and geographic and institutional distribution of human resources.

The Caribbean Examinations Council offers two levels of examinations and certifications, which are taken by students who have completed their secondary education and wish to continue their studies. The first level is the Caribbean

Secondary Education Certification (CSEC), which is generally viewed as an employment qualification, certifying that the holder has graduated from secondary school. The second is the Caribbean Advanced Proficiency Examinations (CAPE), which is considered to be a suitable qualification for entry into tertiary education. Students who wish to sit for the CAPE usually already possess a CSEC or equivalent certification. The CAPE is equivalent to the British Advanced Levels (A-levels); both are voluntary qualifications that are intended for university entrance. Since it was introduced in 1998, the number of subjects offered at CAPE has increased.

Panama has started to implement a certification and re-certification program for medical professionals as a way to ensure training quality and standardization. Concern regarding the quality and standardization of awarded degrees has been raised because of a sustained increase in medical personnel graduating from foreign universities and the growth in the number of public and private universities in the country that have medical schools. After the initiative of Panama's Physician's College, supported by the Ministry of Health and the Social Security Fund, the first set of certification tests were scheduled for May 2014, becoming mandatory for all physicians who graduated in 2013. Re-certification for currently practicing physicians, although regulated, has no set date for implementation. Certification will be mandatory for all recently graduated physicians, and will be a requirement for practicing medicine in public and private institutions. Re-certification on the other hand, will not be mandatory and will not affect the practice of medicine; as such, it will only be effective in the private sector.

In Peru, the certification process could be improved to ensure professional quality and improve work opportunities for professionals. The Council for the Evaluation, Accreditation, and Certification of the Quality of Higher Education Programs (CONEAU) is the governmental entity responsible for accrediting training programs and certifying professionals. In Peru, a process is under way to regulate and ensure quality in university training.

Regulating Negotiation and Dispute Resolution

Legislation and mechanisms for labor negotiation are essential for resolving labor disputes and to ensure there is no disruption in the provision of health services. A review of experiences in Colombia, Jamaica, Panama, and Uruguay reflect commonalities and differences in how countries put together regulations, laws, and resolution mechanics to protect health workers.

Provider Conduct

Experiences in Colombia and Jamaica indicate that both countries have legislation in place to regulate provider conduct. In Colombia, mechanisms for regulating provider conduct are assigned to the National Medical Ethics Board, authorized by Law 1164 of 2007. Medical ethics boards are empowered to impose fines or remove someone from professional practice. Such sanctions take effect when issued and usually are honored by the different institutions.

Another level of sanctions operates through the criminal system, whereby patients can file lawsuits against professionals over conduct. This is a relatively common practice, and there is even an insurance system to provide protection for professionals in the event of such a lawsuit. In Jamaica, the performance and training of Jamaican nurses and midwives is governed by the 1964 Nurses and Midwives Act and the Nurses Registration Law. It was last amended in 2005 to provide control over the training and practice of nurses, midwives, and assistant nurses; registration of nurses and midwives; and enrollment of assistant nurses; the Nursing Council of Jamaica is the designated regulatory body. Section 4 of the Act states that “The Council shall have power to control the training and practice of nurses, midwives and assistant nurses and to register nurses and midwives and enrolled assistant nurses.”

Professional Conduct

Colombia and Jamaica also have regulations and policies in place to guide professional practice. Unlike other professions in the country, medical practice is regulated in Colombia. There is a general medical-practice law, but anesthesiology and radiology are the only medical specialties with their own regulations. Initiatives to regulate other medical specialties are frequently introduced in the Colombia’s Congress, but the legislature has consistently rejected them over the last five years. In Jamaica, at the Ministry of Health level, a Nursing Policy Manual (November 2008) has been put in place to guide nursing operations and practice. The policies included in the manual are grouped under the following four broad nursing practice areas, as identified in the Caribbean Standards of Nursing Care: Patient Care Management, Ward Management, Personnel Management, Risk Management (Jamaica, Ministry of Health 2008).

Compensation

A review of the experiences in Uruguay and Jamaica reflect the participation of multiple actors in key negotiations. In Uruguay, negotiations and agreements that impact health professionals are conducted through salary councils. These councils must be registered with the Executive Branch and their names published in the official register before being able to operate. In negotiations affecting doctors employed in the public sector, the salary councils include representatives from three additional groups, as counterpart representatives to the Administration of State Health Services (ASSE)—the Physicians’ Syndicate of Uruguay (SMU), the Federation of Medical Entities of the Interior (FEMI for its Spanish acronym), and the Round Table of Anesthetic and Surgical Societies (Mesa de Sociedades Anestésico-Quirúrgicas, SAQ). In Jamaica, government ministries who sit at the negotiating table on behalf of nurses include the Ministry of Finance, which has responsibility for disbursing mutually agreed payments; the Ministry of Education, which employs nurses in the education system; and the Ministry of Health, which is represented by its human resources division, the Office of the Chief Medical Officer, and the Office of the Chief Nursing Officer. The Ministry of Labor functions as a referee in the negotiations

when necessary. Professional associations of nurses and midwives negotiate on behalf of their members. Nurses and midwives working in the community and in hospitals are kept abreast of the negotiations through their local representatives and, thus, the information presented represents their consolidated efforts. The major items that are negotiated on their behalf are salaries and allowances—such as meals, commuting taxi rides, housing solutions, scholarships and training, working conditions, and incentive packages. Box 6.1 further elaborates on the bargaining capacities of nurses in Jamaica.

Box 6.1 The Bargaining Power of Nurses in Jamaica

In Jamaica, nurses and midwives are highly organized in the trade union movement. They are key stakeholders in public policy development and represent a strong voice in advocacy. Being the core of the health team, the level of influence of nurses and midwives have on the health system and their positioning among other health sector groups is significant. Their influence can be assessed subjectively through the perceptions of the groups that interact with them and objectively through a measure of their success in negotiations, contribution to the development of health policy, and ability to influence users and other key stakeholders, including the media.

In bargaining negotiations, nurses, midwives, and enrolled assistant nurses are represented in the following manner:

- Registered nurses are represented by the Nurses Association of Jamaica (NAJ), which is the strongest bargaining group among nurses.
- Enrolled assistant nurses are represented by the Jamaica Enrolled Assistant Nurses Association, the National Workers Union, the Jamaica Union of Public Officers and Public Employees, and the Bustamante Industrial Trade Union.
- Midwives are represented by the Jamaica Midwives Association.
- Nurse practitioners are represented by the Jamaica Association of Nurse Practitioners/ National Workers Union.
- Nurse anesthetists are represented by the Jamaica Nurse Anesthetists Association/ National Workers Union.

Nurses have demonstrated significant strength in negotiations and have utilized their right to strike as a means of influencing decision making. In 2009 and 2010, the Ministry of Health recorded five protest periods with fifteen protest days for registered nurses. The longest period of protest was in April 2010, which lasted four consecutive days. This protest was intended to obtain salary increases and allowances and to complete the reclassification exercise that would result in improved compensation. There have been no recorded protests by midwives. The newspapers have recorded smaller protest actions in 2010, and a review of the public comments on websites indicates a majority support for nurses' protests action. The community is very sympathetic to nurses because of their role as first contact health providers and care givers; the perception is that they are poorly paid for the work they do under challenging conditions.

Source: Campbell-Forrester 2013.

Dispute Resolution

Colombia and Jamaica each have two mechanisms for addressing disputes and applying sanctions to health workers. In Colombia, the first avenue is the Medical Ethics Board, where peers evaluate the behavior and decisions of health professionals. The second mechanism involves a criminal judicial action for malpractice, which, even though it has not been set up as a specific judicial area, does allow patients to file lawsuits against both the physician and the provider institution in cases of procedures that have caused personal harm. In Jamaica, sanctions against nurses and midwives are issued at two levels: by the Regional Health Authority and the Ministry of Health, and also by the Nursing Council of Jamaica. The Nursing Council is authorized to administer sanctions in cases of violation of the Nurses and Midwives Act (Section 11), such as dishonesty, negligence, incompetence in the performance of duties, or in cases of conduct that is unbecoming of a nurse, midwife, or assistant nurse. The process of disciplinary action and sanctions may be as simple as verbal or written warnings, training requirements, or counseling requirements, but sanctions may also result in suspension or being struck from the register (termination) (Jamaica, Ministry of Justice 1966).

Professional Associations

Professional associations in Panama and Colombia have played an important role in policy decisions and dialogue with the government. Professional associations in Panama, such as the College of Physicians and associations of specialized physicians or of other trades, participate in the development of policies either by direct request of the Ministry of Health or through pressure. In addition, health committees—local, intersectoral entities created in 1970 to strengthen primary care in the health centers—have the authority to name administrative personnel. However, the perception is that these committees have lost their initial community focus and serve other interests.

Physician associations are important actors in the development and implementation of health policies and are usually called on to participate in deliberations on topics that fall under their scope of interest. In Colombia, professional associations for medicine, nursing, and dentistry are the strongest. Medical associations in the country come together under the Colombian Association of Scientific Societies (ACSC), which has established itself as the locus for the political action of the guilds. For details on the evolution of unions in the Health Sector in Colombia, see box 6.2. Professional associations link trade association objectives with scientific ones and their sphere of influence centers more on lobbying than on collective bargaining. In the past five years, emphasis has been placed on the participation of associations in power centers, whereby they exert their influence over certain bodies in government decisions. The Academy of Medicine and the guilds belong to the National Council on Social Security in Health, an advisory body. Human resource organizations are represented on the National Council of Human Resources for Health, which is part of the Ministry of Health (Malagón 2002). The government has consulted on the implementation of all policy

Box 6.2 Evolution of Unions in Colombia's Health Sector

In Colombia, there are some incentives for organizing unions, especially among health professionals. The health sector has traditionally had unions, both at the departmental health secretariats and in the national government. The strongest union existed in the old Social Security Institute, where it attained strong bargaining power and gained a reputation for the strident expression of its positions. The demise of that agency ended the union's power, however. There have been no national strikes in the health sector in the past 30 years.

Trade unionism in the nursing guild emerged in 1935 as a social and labor response to the decision by the Bureau of Municipal Hygiene of Bogotá to replace the 80 visiting nurses employed by the agency with a foreign religious community. In response, the nurses formed a union, the National Association of Nurses of Colombia (Asociación de Enfermeras de Colombia, or ANEC for its Spanish acronym) to defend their job security, making it the first women's organization to demand the right to work and to professional development.

During the 1990s, union membership and the participation of health workers in union movements gradually declined. A significant factor in this substantial reduction resulted from the 2004–08 restructuring of the Ministry of Health and Public Hospitals. Hospital workforces were terminated and an outsourcing recruitment model was instituted, whereby workers no longer were directly hired by the hospitals, but were instead recruited through human resource consortia (*empresas agrupadoras*). As of this writing, the trend is shifting toward dismantling outsourced recruitment and towards reconfiguring unions around professional associations.

Source: Ruiz and Puerto 2013.

processes, particularly regarding adjustment processes and amendments to Law 100, through working groups, to which it invites actors in the system and where everyone can comment on the proposed changes.

Recent experiences with unions in Colombia, Jamaica, and Panama reflect fragmentation, divisions, and a perception of actions based on self-interest. In Colombia, unions associated with the Ministry of Health are fragmented and have limited ability to act. In Jamaica, unions and professional associations constitute the major administrative representatives of categories of workers and usually wield power in the group. Recently, there have been rifts within the nursing group, with nurse anesthetists and nurse practitioners leaving the Nurses Association of Jamaica (NAJ) and joining other unions, although some members remained in NAJ. In Panama, professional unions have gained a reputation for basing their actions on corporate interests, rather than with public's health in mind.

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Performance of the Health Workforce

Key Messages

- There is limited evidence linking human resources for health (HRH) performance management techniques to health outcomes because outcomes result from the interaction of HRH actions with other initiatives.
- **Access and Availability:** The Latin America and Caribbean region (LAC)'s performance on the access to and availability of health workers is mixed. On the one hand, HRH density and nurse-to-doctor ratios in LAC largely surpass regional targets; on the other hand, programs that promote a primary health care focus, the presence of health professionals in rural areas, and self-sufficiency policies to mitigate the loss of health professionals need to be strengthened. Long wait times and high rates of absenteeism in Costa Rica and Jamaica are resulting in client dissatisfaction.
- **Quality of care:** The region is seeing mixed results. In Costa Rica, there is general dissatisfaction with management services in the health sector; Panama lacks protocols in place to improve care processes. However, Colombia has created the Mandatory Quality Assurance System (SOGC) to maintain and improve the quality of health services, and customer satisfaction is a priority for the government of Jamaica.
- **Accreditation:** To ensure the quality of their health training programs, many LAC countries are implementing accreditation programs, but accreditation remains a voluntary process in many countries, and certification programs of health professionals range from nonexistent to mandatory.
- **Professional practice:** Dual practice is common in LAC, however, discouraging factors faced by health workers can offset the benefits. Dual practice allows health professionals to work in the public and private sectors to increase their earnings, but long clinical and administrative hours have begun to act as discouraging factors.

- **Incentives:** Monetary and nonmonetary incentives offered to health professionals as part of the professional practice environment in LAC have not been found to be linked to performance.

There is limited evidence linking HRH performance management techniques to health outcomes in the region. The literature review conducted as part of this study—and presented in the Framework for Analysis section in the Introduction—found that, while there is a large body of work on performance management and incentives reported on from a global point of view, there is far less information exclusively from a LAC perspective. Few articles on research performed on performance management and incentives were found with an exclusive Latin America focus only and none with a Caribbean only perspective. In addition, no studies specifically link performance management techniques introduced in the field of HRH to performance measures. The evidence for health outcomes may not focus only on HRH issues. In this regard, no claims can be made that performance is due to only performance management techniques and incentives introduced in the area of HRH.

Health workforce performance management strategies tend to focus on quality and efficiency. On the one hand, performance management practices often hope to improve quality of care, manifested in such ways as reduced cross-facility (hospital-to-hospital) infection rates or adherence to treatment protocols. On the other hand, these policies also may be concerned with efficiency questions, such as improving health worker productivity measures as outpatients seen. Concerns for equity may also be built into performance management strategies, such as contracting with providers to provide services targeted towards the poor.

There is a well agreed upon consensus on the strategic nature of health workforce issues. Arguably the most significant input to a health care system, the performance of the health workforce has a direct and significant impact on the overall quality of the system and its outcomes. Implementing performance management strategies implies that there must be a systematic approach to the policies that surround the health care workforce. Such an approach must be based on a contextual analysis, with medium- to long-term goals, to achieve any positive impact. With this in mind, the following sections highlight some of the findings that arose from the application of the Rapid Assessment Tool on Policies of Performance Management in the six countries covered in this publication.

Health Outcomes

All six focus countries have lower infant and under-5 mortality rates, compared with the LAC average of 16 deaths per 1,000 live births and 19 deaths per 1,000, respectively. In Colombia, these two rates have been declining since 2000. In the area of maternal mortality, the picture is not as consistent. The maternal mortality rate for the LAC region as a whole is 85 per 100,000 live births. But while Uruguay (8.0), Costa Rica (23.1), and Colombia (72.9) all have maternal mortality rates below the regional rate, Colombia's rose in 2008 by approximately

Table 7.1 Maternal, Infant, and Under-5 Mortality Rates, Focus Countries and Latin America and the Caribbean Average, 2013

	<i>Maternal mortality (100,000 live births)</i>	<i>Infant mortality rate (per 1,000 live births)</i>	<i>Under-5 mortality rate (per 1,000 live births)</i>
Colombia	72.9	15.1	17.6
Costa Rica	23.1	8.6	9.9
Jamaica	89.0	14.4	16.8
Panama	92.0	15.9	18.5
Peru	93.0	14.1	18.2
Uruguay	8.0	6.2	7.2
LAC average	85	16	19

Source: UNICEF 2013 MDG statistics.

Note: LAC = Latin America and the Caribbean.

12 deaths per 100,000 live births (Colombia, DANE 2015), and Jamaica (89.0), Panama (92.0), and Peru (93.0) all have higher rates than the regional average (table 7.1).

Uruguay has the best health outcomes among the focus countries, which is linked to the fact that it allocates the largest share of its national budget to the health sector. It is not surprising, then, to see Uruguay reporting the lowest mortality rates across all three indicators, given that its professional medical sector is the oldest in the country and accounts for the greatest share of the budget. Moreover, this profession turns out the greatest number of postgraduates and the greatest number of instructors. It is also the professional sector with the highest number of persons holding several jobs. Although in terms of percentage Uruguay's population of physicians is one of the largest in the world, levels of open unemployment are not very high. The bottom line is that Uruguay's significant expenditures on HRH are resulting in strong health outcomes.

Access and Availability

Access to health care services—or the availability of such services—is one of the aspects of a health care system that indicates its level of performance. Access is also an important concept for health policy, despite the fact that the way it is defined may vary: for example, access is sometimes referred to as the entry point to or utilization of the health care system; it also has been used to describe those factors that influence or impact the ability to enter or use the system. These differences notwithstanding, given the fact that access represents how a patient comes together with a health system, it is necessary to rely on an ample concept that encompasses factors both intrinsic (such as infrastructure, human resource, and cost) and extrinsic (such as road access, transportation, and the economy) to the health care system itself. This chapter focuses on the availability of human resource in health care as one of the intrinsic factors of access to the health care system in the focus countries.

Staff Ratios

With a HRH density of 91.9 per 10,000 population, LAC surpasses the regional target of 25 health workers per 10,000 population. In addition, it is one of only two regions worldwide to surpass the global HRH density average of 42.9. Furthermore, the ratio of at least one qualified nurse to one qualified doctor (1:1) is being largely met in the region. Colombia (1:1.8), Costa Rica (1.85:1), Jamaica (2.3:1), and Peru (1:1) all have either achieved or surpassed the target. Even though Panama has not achieved the target, its qualified nurse-to-doctor ratio is higher in the rural areas (1.15:1) than it urban areas (0.85:1). This is significant, considering that the availability of health workers in rural areas, with a higher ratio of nurses to doctors, is critical to ensure access to essential primary health care services. While it is useful to view HRH density from a needs-based approach in terms of targets, this information must be complemented by a labor market assessment of the HRH workforce to provide a thorough insight on the challenges and opportunities in this area.

Access to Primary Health Care

Even though LAC has programs in place to ensure access to care with a primary health care focus, on-the-ground efforts do not always reflect this focus. On the positive side, at least 40 percent of Colombia's health workforce is composed of primary health care physicians and the country has established a mandatory social service program (SSO) whereby recent graduates of health programs are required to fulfill a social commitment in their professional field before being allowed to practice. Uruguay, too, has developed health programs targeting low-income groups, which provide primary health care through neighborhood polyclinics. In Jamaica, however, health professionals working at the primary health care level earn much lower salaries than their counterparts working in the secondary level of care. And in Panama, most doctors and nurses work in the secondary-care level, while the primary health care level employs the fewest workers of all three levels. Finally, in Peru, competency profiles for health specializations show that only two specialties place a priority on primary health care or community care.

Availability of Health Professionals in Rural Areas

The LAC region has programs designed to strengthen access to health care professionals in rural areas, but only Peru is seeing positive results. In 2009, Peru restructured its SERUMS program (a program serving rural and urban marginal areas) using poverty maps to identify the poor and make poorer districts a priority. This resulted in an increase of health professionals working in such areas from 50 percent to 89 percent between 2009 and 2011. Even though Colombia, Costa Rica, and Panama all have programs and incentives to encourage rural service, every one of these countries continues to have a high concentration of health professionals in urban areas compared to rural areas. In Colombia, not even one specialist could be found in the five most rural departments with largely indigenous populations. In Costa Rica, health professionals remain concentrated in the clinics and hospitals of the central region,

and patients who live outside this area are forced to travel to receive specialized medical care. In Panama, only 11.6 percent of doctors and 15.7 percent of nurses provide services in rural areas.

Availability of Health Workers In-Country

The LAC region continues to struggle with setting up self-sufficiency policies to mitigate the loss of health professionals from migration with recognizing foreign-trained specialists brought in to fill shortages. The region is losing health professionals to migration, particularly Peru, which accounts for 44.7 percent of all outmigration in the region. Both Jamaica and Peru experience a high intention to migrate among health professionals entering and already in health training programs. To offset this loss of health professionals to migration, foreign-trained specialists are increasing in the region. Colombia, Costa Rica, Peru, and Uruguay have all developed mechanisms for certifying foreign-trained professionals through degree validation and the easing of formal hiring processes in order to fill gaps in health worker presence in rural, remote areas. That said, the region continues to struggle with putting in place self-sufficiency policies that would act as incentives for health workers to stay and work in their countries, addressing such challenges as a lack of promotion plans, limited nonmonetary incentives, and the inability to absorb recent health professional graduates into the health workforce.

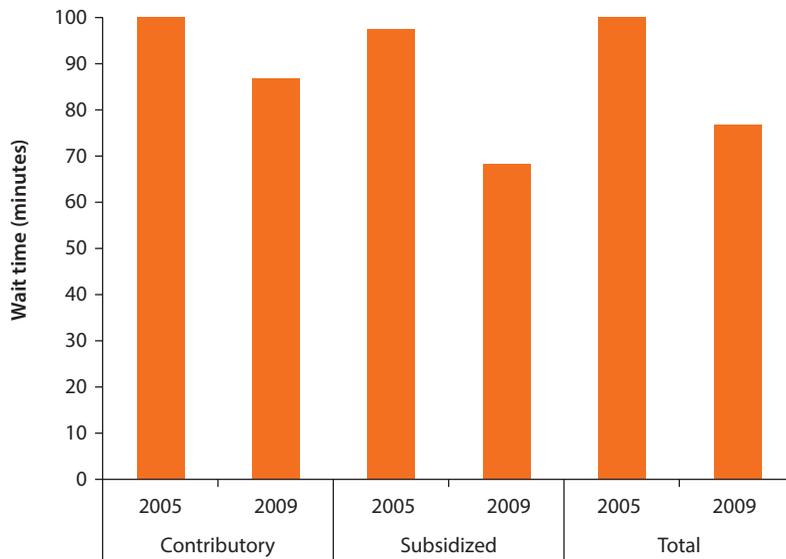
Patient Wait Times

In Colombia, average patient wait times are improving. The average waiting time for patients in all services in 2009 was 11 days, down from 15 days reported in 2005. In terms of emergencies, wait times were approximately 77 minutes in 2009, which also represented a decrease from the 100 minutes reported in 2005 (figure 7.1). In general, average wait times are longer in the contributory system than in the subsidized system, especially in emergency care and surgical procedures in 2009.

In Jamaica, wait times are focused on service delivery points, not on the interactions between nurses or midwives and the client. Although the demand for health services has grown, especially at the primary health care level, the supply of critical human resources (nurses, midwives, and pharmacists) and services have been insufficient to meet the increased demand. This has resulted in larger clinics; a restructuring of clinics to include an extension of working hours, which adds stress on human resources; a reduction in the quality of care; and challenges in meeting client demands, which results in longer wait times and appointments and greater client dissatisfaction. Customer satisfaction surveys are periodically done to identify the client–health worker relationship, wait times, communication practices, and service delivery quality.

In Costa Rica, long wait periods for patients were the main factor for the social security (CCSS) health services, having received a lower score. In 1997, a study of CCSS health services was undertaken in each region of the country. The study used a numerical scale of 1 to 10, and the CCSS services received an average rating of 8.2. Hospitalization services received the highest rating, with

Figure 7.1 Average Wait Time (in Minutes) for Patients Seeking Emergency Care in the Contributory and Subsidized Systems, Colombia, 2005 and 2009



Source: Colombia, Defensoría del Pueblo 2007.

a score of 8.6, followed by the basic health team for integrated care (EBAIS), with an average score of 8.4. Medical and paramedical staff were both highly rated. In 2006, the University of Costa Rica conducted a new survey using the same numerical scale, and this time, the scores were low. When compared with outpatient consultations, the EBAIS, clinics, and hospitals received an average rating of 6, and one of the main reasons given for the low scores was the long wait periods for patients (UCR 2006).

Another major concern expressed by the respondents is the quality of care, given the long waiting periods to schedule appointments with specialists or for lab tests and surgeries. However, despite the fact that, on average, 59 percent of physicians work more than 48 hours at their place of employment and 59 percent of nurses work between 41 and 48 hours on average, a major workload for these health human resources (PAHO 2012), it would appear that this is inadequate to improve general health care. For example, waiting lists for cancer patients reveal waiting periods of between six months and one year for a procedure, and, even more worrying, there are breast cancer cases where documentation shows that up to 24 months can elapse between diagnosis and treatment.¹

Absenteeism

In Costa Rica, average absenteeism rates in CCSS are roughly 20 percent (gross) and 15 percent (net) (CCSS 2011). Shift work is the most highly compensated, accounting for most of the salary supplements. Some groups criticize this work,

claiming that employees “spend the time sleeping,” and that incentives for being on call serve instead as a pretext for absenteeism.

In Jamaica, working conditions continue to be an issue of grave concern, affecting staff retention, absenteeism, and attrition rate. Absenteeism appeared to be a significant concern for health managers in the public health sector. A cross-sectional study in Kingston Hospital in Jamaica revealed that key factors contributing to absenteeism among registered nurses and midwives include job dissatisfaction, overwork, and burnout, with over 81 percent of respondents citing high levels of job stress. There is a perception that absenteeism affects performance, but there were no key performance indicators to measure the impact of absenteeism on health service delivery and the quality of care. Information about the problem’s magnitude and its impact is not readily available. Neither was there evidence of action taken in the form of incentives or sanctions to reduce absenteeism and improve nurse/midwife performance.

Quality of Care and Patient Satisfaction

The benefits that a health system can provide significantly depend on the quality of those who deliver services. Human resource management in health care systems, along with an ongoing evaluation of the quality of the workforce, is necessary to maintain appropriate quality of care.

Patient satisfaction is also a key determinant of the quality of care delivered by health care systems. There are many facets to patient satisfaction: from a physician’s perspective, it should relate to the clinical outcome, but from a patient’s perspective, satisfaction is heavily influenced by the personal interactions a person has with the system and the people who are part of it. As such, the interface between patients and the health care workforce with whom they interact creates an important feedback mechanism that should be considered for patient satisfaction. In this regard, patient satisfaction becomes an important source of information about the quality of the workforce, which, in turn, contributes to the overall quality of the system’s benefits.

Quality Assurance

Colombia’s Mandatory Quality Assurance System (SOGC), backed by Law 715 and Decree 1011 of 2006, is designed to maintain and improve health-service quality. The system has four processes: a unified authorization system; quality improvement audits; a unified accreditation system; and a quality information system. The system, which all institutions that provide services must adhere to, sets out the requirements for the provision of health services nationwide. According to Cendex (Ruíz and Puerto 2013), using data from the Ministry of Health, the hospital readmission rate in the country fluctuated between 1.56 in 2006 and 1.95 in 2009, pointing to the need to ensure that readmission rates do not rise.

In Costa Rica, even though patients rate CCSS services highly, they expressed overall dissatisfaction with its management services. A 2011 national public

opinion survey conducted by UNIMER, a marketing and public-opinion research firm, and the Costa Rican daily *La Nación*, showed that 41 percent of patients rated CCSS services as very good or good. The same survey respondents believed that CCSS is the institution that has contributed most toward the welfare of the Costa Rican people over the past 50 years. CCSS's overall favorable rating is supported by the institution's coverage of more than 90 percent of Costa Rican people, representing virtually universal coverage from a financial and geographic standpoint. However, respondents tended to express dissatisfaction with CCSS's management services, as evidenced by complaints pertaining to treatment and time spent with patients, as well as the actual performance of human resources in the health sector. An important factor in this complaint is the undue concentration of medical and specialist services in the Greater Metropolitan Area, leaving the country's most remote areas with lower levels of specialist care.

Customer satisfaction—a sensitive indicator of performance—is a priority for the Government of Jamaica. The country's Client Charter outlines the standards of service, rights and responsibilities of the client, services, and the procedures for clients to register complaints. Client Charters are available in all health regions, and customer satisfaction is a quality indicator included in the service agreements. Customer satisfaction surveys are periodically done to identify the relationship between client and health worker, waiting times, communication practices, and service delivery quality.

The Ministry of Health's Policy Division undertook a mix-method analysis of the impact of the abolition of the user fees policy on the quality of service delivery. The assessment was carried out in June 2011 and the findings were presented to a Committee of the Parliament of Jamaica in September 2011. Patients were asked to rate their level of satisfaction in the following six areas: quality of health facilities (such as the availability of information, signage, level of privacy, space in waiting area); attitude of selected health care providers; wait times to access services; quality of services; quality of care delivered by providers; and quality of health care services. Survey results show that in the areas of helpfulness and courtesy, physicians enjoy the highest level of satisfaction among patients (78 percent), followed by nurses (69 percent), and pharmacists (55 percent). Respondents were asked to rate the quality of care delivered by health care providers, ranging from "very satisfied," to "satisfied," "dissatisfied," and "very dissatisfied." Most patients said that they were either "very satisfied" or "satisfied" with the quality of care they received: 92 percent by physicians, 93 percent by other medical staff, and 84 percent by nurses. Only 16 percent of respondents said that they were either "dissatisfied" or "very dissatisfied" with the quality of care provided by nurses, followed by 8 percent by doctors, and 7 percent by other medical staff (Jamaica, Ministry of Health 2011).

With few exceptions, Ministry of Health service delivery mechanisms in Panama have no protocols in place to improve care processes, such as hotlines for processing complaints and claims or patient advocate avenues. The Children's Hospital is such an exception, which recently set up an Office of Quality and Patient Safety. The Social Security Fund, on the other hand, also has several

avenues for channeling complaints and suggestions from patients, including electronic venues (e-mail, chat, and Twitter) and via classroom, with campaigns to encourage patients to access these channels and provide feedback.

Accreditation

Many LAC countries are implementing the accreditation programs at their health training institutes, but this process remains voluntary in many countries. In Uruguay and Panama, 70 percent of health training institutions have been accredited by a recognized accreditation body. Peru has just begun the accreditation process of its health training institutions, with 45 universities and 234 training programs having been registered, but so far only 2 having been accredited. In Colombia, Costa Rica, and Jamaica, accreditation continues to be a voluntary process and is not thought to provide any advantage in terms of the perception of quality nor any competitive edge over nonaccredited entities. Countries with voluntary accreditation include self-assessment as part of the process.

Certification

Certification programs in the region range from nonexistent to mandatory; in general, they should be reviewed to assess their role and impact on quality. Colombia's efforts to introduce a certification process for health professionals were declared unconstitutional on the grounds that it imposed restrictions on medical practice and so infringed on Colombia's freedom to practice medicine. As a result, readiness for entry to the health labor market in the country comes solely from having received a university degree. In the Caribbean, the Caribbean Examinations Council offers two levels of examinations and certifications as a way to assure that the holder is a secondary school graduate and to signal readiness for tertiary education. Panama has started to implement a certification and re-certification program for medical professionals as a way to protect the quality and standardization of training. Certification is mandatory for all physicians who graduated in 2013 and later, and will become a requirement for practicing medicine in the public and private sectors. Peru's accreditation process could be improved to guarantee professional quality and improve work opportunities for professionals.

Professional Practice

In considering human resources in health care, it is important to consider certain professional practices that affect the health care system and the quality of care it provides.

Dual Practice

Dual practice refers to work in private practice that physicians who also work in government jobs perform. This is a common problem in low- and middle-income countries worldwide, and it is important from a public health perspective. Dual practice has a negative effect on health service access, quality, efficiency,

and equity, since doctors tend to sacrifice their public work for their private practices in order to enhance their income and other benefits. The implication is that the underlying reason for the occurrence of dual practice are a poor salary structure and the absence of incentives in public practice.

In Colombia, workers are not permitted to work two full-time jobs in the same institution, but there are no restrictions on working in both the public and private sectors during different shifts, and some workers do so. Dual practice is not as common in the country as it was before the health sector reform took place. The National Association of Nurses of Colombia (Asociación Nacional de Enfermeras de Colombia, or ANEC for its Spanish acronym) has reported focus group–research findings, that 30 percent of their member nurses could be engaged in dual practice. They do stress, though, that the percentage has been declining due to the excessive workload for health workers in a single institution. Health professionals turn to dual practice not only to earn more, but also because of the social security benefits they might be able to get at one of their jobs. Among residents, work weeks of over 100 hours, including night shifts, are common; Decree 2376 of 2010 has limited the work week to 66 hours. Long hours, not only seeing patients, but also doing administrative paperwork and procedures, have discouraged professionals from pursuing dual practice.

In Costa Rica, dual practice is permitted by law, allowing professionals to work in both the private and public sectors. This allowance is permitted as long as health workers do not engage in private practice during public working hours, and vice versa. Physicians work eight-hour shifts daily; after completing their work day, which typically ends at 3 p.m., they are free to use their time as they choose (shifts, on-call duty, free time, private practice, or teaching). The problem with this arrangement is that health professionals did engage in private practice during their public work hours, mainly because of the rapid growth of private practices near national hospitals. Medical-center administrators have begun to regulate this situation, even taking legal action against some health professionals. Clearly, the public and private sectors must coexist in Costa Rica, as this type of competition is beneficial, provided the individual is the primary beneficiary. In this regard, one of the recommendations emanating from a recent analysis of the CCSS was the possibility of hiring professionals to work exclusively in either the private or public sector.

In Jamaica, the policy of dual practice for doctors in the public sector is part of a negotiated agreement with the government, which has specific terms and conditions attached. The relevant policy, referred to as the Engagement in Private Work, is quite explicit. The Civil Service Staff Orders (2004) provides the following guidance for public sector workers in Section 4.2.8, Engagement in Private Work, and Section 4.2.9, Conflict of Interest. Section 4.2.8 states: “Officers may engage in private work, only under specified conditions and with prior permission from the appropriate authority/Service Commission, based upon assessment of potential for conflict of interest.” Section 4.2.9 includes “Engagement in private activity similar to official functions” as a potential for conflict of interest. A resident can engage in private work after completing eight

hours of work, provided he or she is not on call. A consultant physician is allowed to work 28 hours in the public sector and then is free to do private work for 12 hours each week. There is no such agreement in place for nurses and midwives, however. The Jamaica case study, which is reported on in this publication, was unable to determine definitively the extent of dual practice and pin down an accurate number of professionals working simultaneously the public and private sectors. A review of employment data from a sample of private hospitals revealed that, in practice, a significant portion of the work output is undertaken by part-time or sessional nurses recruited from the public sector.

Malpractice

Colombia has a criminal judicial mechanism for malpractice. Even though it has not been developed as a specific judicial area, it does allow patients to file lawsuits against a physician and the service provider institution in cases of procedures that cause personal harm. According to associations of specialists and The Colombian Society of Anesthesiology and Resuscitation (SCARE for its Spanish acronym), the agency that handles malpractice insurance policies, sanctioning mechanisms do not usually affect daily practice by influencing physician conduct. There have been several cases, in areas such as cosmetic and plastic surgery, that have been widely publicized in the media, where different medical errors have led to lawsuits and pressure on the public regulatory system. Many of these problems are caused by undertrained professionals, general practitioners, and nonspecialists who perform procedures that are beyond their skills.

Incentives

Incentives offered to health professionals as part of the professional practice environment in the six focus countries have not been found to be linked to performance. Colombia does not have a national policy offering monetary incentives to its health workforce. However, like Costa Rica, Jamaica, Panama and Peru, it has introduced financial incentives to encourage work in rural, remote areas that are not linked to performance. In addition to the financial incentive to encourage rural work, Costa Rica, Jamaica, and Uruguay all provide financial incentives to health workers. In Costa Rica, financial incentives have resulted in salary increases and bonuses significantly above that of other categories of professionals. In Jamaica, financial incentives are offered to nurses in the form of access to private health insurance or a contributory pension. In Uruguay, financial incentives offered to health workers are mainly to align salary levels of the public with those of the private sector. Nonmonetary incentives offered to health workers in LAC are limited and are mainly in place to encourage rural, remote based work.

Productivity and Efficiency

Current global health trends have left decision makers with the challenge of meeting an increasing demand for health care services with current available funds. In economic terms, this is measured as efficiency—how well health care

resources are used to the best value of the available money. Efficiency, therefore, measures the relation between the various resource inputs, which here include labor and outcome measures (for example, number treated, wait times, and lives saved). There are, however, two very important forms of efficiency that apply to the human resource scene within health care. The first refers to technical efficiency, which is a direct relation between a given resource and the health care outcome; in other words, where maximizing an outcome with the same resource input is considered efficient. The second, which is closer to most health care scenarios, refers to productive efficiency, where more than one resource input intervenes in generating the outcome; therefore, it is considered efficient when there is maximization of a given outcome for a given (sum) cost for those inputs. In the case of human resource in health care, it almost entirely must be evaluated in the productive efficiency context.

Occupancy Rates

Qualitative evidence, from the opinions of public and private hospital associations, indicates that occupancy rates in private, high-level facilities are high in Colombia. Two factors contribute to this situation: first, limited hospital financing has affected all public hospitals, reducing their response capacity; and second, incentives that encourage demand, resulting from the fee-for-service system that encourages overtreatment in private facilities.

Efficiency

The introduction of market-based schemes and managed care in Colombia was a way of introducing efficiency in the use of financial resources. By introducing market-based schemes and managed care in the health services—such as public-private integration and the development of benefits packages—efficiency could be introduced in the use of the financial resources that were available for the newly organized health system. Colombia's health system is characterized by a pronounced horizontal and vertical fragmentation of its institutional structure and services. There is widespread political and administrative decentralization that affects many aspects of the health system, and departments and municipalities have independence in decision making about services and human resources. Furthermore, the regulated competition system that has been set up was enabled by the adoption of the State Social Enterprises model by public hospitals, which has complete financial autonomy. This may have led to greater efficiency in the use of resources in each decentralized unit, but it poses a considerable challenge for human resource planning and for the implementation of policies on health personnel distribution, performance, and salary conditions.

In Panama, the Social Security Fund has a system for monitoring the performance of the functions of the human resource administrative service. Such performance is based on a four-month tour to assess administrative and production aspects, using the following criteria: a checklist or checklists; a performance comparison with objective standards (only for attendance and timeliness, while the assessment of other criteria is subjective and depends on the evaluator);

the instant feedback from the supervisor to the staff being supervised; regular updates and technical guides; and training as needed. To follow up on the findings of evaluations of human resources, the Social Security Fund has human resource staff in all its facilities.

Note

1. See *Mujeres que salvan vidas: Compartir, aprender y cuidar*, <http://www.mujeresquesalvanvidas.info>.

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Conclusions

There is limited evidence to link human resources for health (HRH) performance management techniques to health outcomes, because outcomes result from the interaction of HRH actions with other initiatives.

- **Access and availability:** Latin America and the Caribbean (LAC)'s performance on the access to and availability of health workers is mixed. While HRH density and nurse-to-doctor ratios in the region mainly surpass regional targets, programs that promote a primary health care focus, the presence of health professionals in rural areas, and self-sufficiency policies to mitigate the loss of health professionals need to be strengthened. Moreover, long wait times and high rates of absenteeism in Costa Rica and Jamaica have led to client dissatisfaction.
- **Quality of care:** The region shows mixed results. On the one hand, in Costa Rica, there is general dissatisfaction with the health sector's management services; and in Panama, no protocols are in place to improve health care processes. On the other hand, Colombia has created a mandatory quality assurance system (SOGC) to maintain and improve the quality of health services, and customer satisfaction is a priority for the government of Jamaica.
- **Accreditation:** To ensure the quality of their health training programs, many LAC countries are implementing accreditation programs; these programs are voluntary, and certification programs for health professionals in the region range from nonexistent to mandatory.
- **Professional practice:** Dual practice is common in LAC, although discouraging factors faced by health workers can offset the benefits. Dual practice allows health professionals to work in both the public and the private health sectors to increase their earnings, but long clinical and administrative hours have begun to act as discouraging factors.

APPENDIX A

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Rapid Assessment Tool on Policies of Performance Management

Health Human Resource Policies in Latin America and the Caribbean: Rapid Assessment Tool on Policies of Performance Management—Indicators

<i>Acronym</i>	<i>Description</i>
CRS	Creditor reporting system (international development statistics)
CMR	Child mortality ratio
IMR	Infant mortality ratio
MMR	Maternal mortality ratio
MOH	Ministry of Health
NHA	National Health Accounts
OOP	Out-of-pocket
WDI	World development indicators (World Bank)
WHO	World Health Organization

The following indicators are designed to operationalize in-country data collection and analysis corresponding to conceptual framework of the Rapid Assessment Tool on Policies of Performance Management. It provides both a comprehensive set of indicators on which to collect relevant data and indicator-specific suggestions on possible data sources. It is recommended that data collection be divided into the following steps:

- Tailor indicator list to country/study-specific parameters by eliminating non-applicable indicators and revising indicators to intended scope of data collection (e.g., specifying precise cadres on which to collect information; focusing indicators to particular subsets of health providers or those reimbursed by particular financing systems).
- Conduct desk-based review of quantitative data sources and fill in as many data points as possible to identify gaps requiring further in-country data collection.
- Prepare for interview data collection: identify key informants (e.g., line ministry officials; development partner personnel; academic experts); and develop interview protocols for qualitative data based on the indicator suggestions, including

adaptation of suggested interview themes to country-specific features of the health system. If possible, use quantitative data findings to prompt responses.

- Conduct interviews, if possible with two interviewers. One should ask the questions and be flexible about the order, so as to allow respondents to “tell their story,” rather than fill in the blanks; the second interviewer should take notes. Notes should be written up after each interview and kept for review.

<i>Category/indicator (priority indicators for core performance management issues and objectives are in italics)</i>	<i>Possible data source(s)</i>	
<i>Country context</i>		
Economic conditions		
Quantitative		
World Bank income status	WDI	
Donor assistance as percent of government budget	International: WDI, WHO, CRS; national: MOH	
Donor assistance as percent of total health budget	International: WDI, WHO, CRS; national: MOH	
Government characteristics		
Quantitative		
Timeline of political party alternation of power	National reports	
Number of years regime in power at time of performance management reforms/policies/etc. (political scientist expert opinion)		
Qualitative		
Characterization of regime characteristics (historical and/or at time or performance management reforms/policies) along following dimensions		
Balance of power between executive and legislative branches: “strong mayor” vs. “weak mayor” system	Key informant interviews: political science experts (e.g., academic faculty)	
Strength of judicial branch: high, medium, low		
Degree of patronage: highly vs. little nepotistic/patrimonial/clientelistic/ dominated by familial dynasties		
Ideological leanings (e.g., reform/progressive, moderate/conservative)		
Political power of stakeholders		
Quantitative		
Relative power of unions, professional associations		
Number of health strikes in past 5 years	National reports	
Percent of membership in professional associations, by cadre	MOH, professional association reports	
Public sector collective bargaining (if existing)		
Level of negotiation, by Human resources for health (HRH) cadre: national, sub-national (e.g., region, province), local (e.g., district, municipality), facility		
Major items eligible for negotiation, by HRH cadre		
<i>Item (check all that apply)</i>	<i>Yes</i>	<i>Comments</i>
Working hours (in public sector)		Key informant interviews: health sector experts (e.g., MOH HRH unit personnel)
Private sector activities		
Work-related tasks and expectations		
Licensing or other regulatory conditions		
Other		

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<i>Category/indicator (priority indicators for core performance management issues and objectives are in italics)</i>	<i>Possible data source(s)</i>																																			
<p>Qualitative</p> <p>Evidence of institutionalized role of different stakeholders in policy making in past 10 years (e.g., official government consultation to develop X policy; assessment of influence of non-governmental HRH organizations (e.g., unions, professional associations) in Ministry of Health policymaking)</p>	<p>Key informant interviews: political science experts (e.g., academic faculty) and/or health sector experts (e.g., MOH HRH unit personnel)</p>																																			
Health system characteristics and policy levers financing																																				
<p>Quantitative</p> <p>General government revenues as percent of total health spending</p> <p>Insurance as percent of all health spending</p> <p>Number of different significant private insurance providers</p> <p><i>OOP payments as percent of total health spending</i></p>	<p>International: WDI, WHO</p> <p>National: NHA; MOH</p>																																			
Provider payment and incentives: general																																				
<p>Quantitative</p> <p>Percent of HRH on public sector salary (full/part-time), by cadre</p> <p>Percent of HRH contracted by public sector (full/part-time) and average contract length, by cadre</p> <p>Mean public sector HRH remuneration (e.g., salaried, contracted) vs. mean public sector remuneration for professionals</p> <p>Earning potential differences between public and private sector HRH, urban and rural practice, in-country vs. abroad</p> <p><i>Monetary incentives (e.g., housing allowances, hardship allowances, prizes) as percent of base remuneration</i></p> <p><i>Monetary value of non-monetary incentives as percent of base remuneration</i></p>	<p>MOH</p>																																			
<p>Qualitative</p> <p><i>Perception of fairness of general level of income of different cadres of public sector health workers in comparison to private sector opportunities and to other professionals (focus group of knowledgeable health professionals or expert opinion)</i></p>	<p>Key informant interviews: health sector experts (e.g., MOH HRH unit personnel); focus group (e.g., health administrators and workers)</p>																																			
Provider payment and incentives: pay-for-performance or other output-based policies (including contracting)																																				
<p>Quantitative</p> <p><i>Percent of HRH with public sector pay-for-performance/bonus payments</i></p> <p><i>Percent of HRH or facilities providing service on contract basis</i></p> <p><i>Percent of facilities providing services on global budget basis (by level of facility)</i></p> <p><i>Pay-for-performance/bonus payments as percent of base remuneration (e.g., salary, contract value, etc.): mean, highest 10%</i></p>	<p>MOH</p>																																			
<p>Qualitative</p> <p><i>Mapping of stakeholder involvement in policy development</i></p>																																				
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;"><i>Stakeholder (check/rate all that apply)</i></th> <th style="text-align: center; border-bottom: 1px solid black;"><i>Initiator</i></th> <th style="text-align: center; border-bottom: 1px solid black;"><i>Champion</i></th> <th style="text-align: center; border-bottom: 1px solid black;"><i>Opponent</i></th> <th style="text-align: center; border-bottom: 1px solid black;"><i>Power</i></th> </tr> </thead> <tbody> <tr> <td style="border-bottom: 1px solid black;">Government</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="border-bottom: 1px solid black;">MOH</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="border-bottom: 1px solid black;">Ministry of Education</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="border-bottom: 1px solid black;">Ministry of Finance/Economic Development</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="border-bottom: 1px solid black;">Ministry of Planning</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="border-bottom: 1px solid black;">Civil Service Agency</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	<i>Stakeholder (check/rate all that apply)</i>	<i>Initiator</i>	<i>Champion</i>	<i>Opponent</i>	<i>Power</i>	Government					MOH					Ministry of Education					Ministry of Finance/Economic Development					Ministry of Planning					Civil Service Agency					<p>Key informant interviews (e.g., high-level health officials or national or international experts involved in pay for performance design and implementation)</p>
<i>Stakeholder (check/rate all that apply)</i>	<i>Initiator</i>	<i>Champion</i>	<i>Opponent</i>	<i>Power</i>																																
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Civil Service Agency																																				

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Category/indicator (priority indicators for core performance management issues and objectives are in italics)

Possible data source(s)

Sub-national governments/line item Ministries

Non-governmental

Professional unions/associations

Non-Governmental Organizations (national, international)

International institutions (donor, technical assistance agencies)

Media

Mapping of process for developing and administering pay-for-performance/bonus payments

<i>Dimension</i>	<i>Level(s)/ value(s)</i>	<i>Who decides</i>	<i>Criteria used</i>	<i>Comments</i>
Eligible recipients (e.g., public sector HRH; contracted HRH)				Key informant interviews (e.g., high-level health officials; external observers and personnel from organizations providing sources of pay-for- performance funds; national or international experts involved in pay for performance design and implementation); "Comments" should include relevant qualitative data to enrich/provide context to quantitative data
Recipient selection				
Unit of payment (e.g., individuals, teams, facilities, areas)				
Monetary payment levels				
Distribution of payments (e.g., within facilities, within health areas, within national systems)				
Monitoring and oversight mechanisms				

Qualitative

Characterization of quality of policy administration (selected questions; additional questions can be formulated based on specific country contexts)

*Do pay-for-performance administrators have necessary skills to efficiently/
effectively manage schemes? Why or why not?*

What evidence exists that beneficiaries of pay-for-performance "game" the system?

*How effectively do pay-for-performance oversight bodies carry out monitoring and
evaluation?*

*For which cadres/geographical areas of the country/labor market sectors/etc. have
pay-for-performance policies been best implemented? Why?*

*How transparent are all aspects of developing/administering pay-for-performance
policies? (see dimensions in table above for illustrative listing of developing/
administering pay-for-performance policies)?*

Provider payment and incentives: policies to attract HRH to practice under-served areas or other service provision targeting mechanisms

Quantitative

*Percent of HRH providers receiving deployment-related incentives (e.g., hardship
allowances for serving in under-served areas), by HRH cadre*

MOH

*Ratio of average age and years of service of HRH benefiting from incentives to practice
in under-served areas to overall average age and years of service of HRH eligible to
practice in under-served areas*

table continues next page

Category/indicator (priority indicators for core performance management issues and objectives are in italics)

Possible data source(s)

Qualitative

Mapping of stakeholder involvement in policy development

<i>Stakeholder</i>	<i>Initiator</i>	<i>Champion</i>	<i>Opponent</i>	<i>Power</i>	
Government					Key informant interviews (e.g., high-level health officials or national or international experts involved in pay-for-performance design and implementation)
MOH					
Ministry of Education					
Ministry of Finance/ Economic Development					
Ministry of Planning					
Civil Service Agency					
Sub-national governments/ line item Ministries					
<i>Non-governmental</i>					
Professional unions/ associations					
Non-Governmental Organizations (national, international)					
International institutions (donor, technical assistance agencies)					
Media					

Mapping of process for developing and administering policies to attract HRH to practice under-served areas or other service provision targeting mechanisms (e.g., incentives to practice in particular clinical specialties)

<i>Dimension</i>	<i>Level(s) / value(s)</i>	<i>Who decides</i>	<i>Criteria used</i>	<i>Comments</i>	
Eligible recipients (e.g., public sector HRH; contracted HRH)					Key informant interviews (e.g., high-level health officials; external observers and personnel from organizations providing sources of pay-for-performance funds; national or international experts involved in pay for performance design and implementation); "Comments" should include relevant qualitative data to enrich/provide context to quantitative data
Recipient selection					
Unit of payment (e.g., individuals, teams, facilities, areas)					
Monetary payment levels					
Distribution of payments (e.g., within facilities, within health areas, within national systems)					
Monitoring and oversight mechanisms					

table continues next page

Category/indicator (priority indicators for core performance management issues and objectives are in italics)

Possible data source(s)

Qualitative

Characterization of policies to attract HRH to practice under-served areas or other service provision targeting mechanisms (e.g., incentives to practice in particular clinical specialties)

Which of the following incentives exist to attract HRH to practice in under-served areas

<i>Item (check all that apply)</i>	<i>Yes</i>	<i>Comments</i>
Higher basic salary		
Higher allowances/non-salary		
Higher bonus		
Housing or other material support		
Increased chances for promotion		
Decreased mandatory public sector deployment time		
Better access to continuing education/in-service training		
Other		

What kind of HRH does the policy attract and how does their quality compare to that of the general workforce (e.g., seasoned vs. inexperienced, high- vs. low-achievers?)

Service organization and provision

General

Quantitative

Number of providers/10,000 population, by cadre (e.g., MDs, nurses), population density (e.g., rural, urban), gender, labor market

International: WHO
National: MOH

Percent of workforce working full-time in public/private labor markets, by cadre

Percent of public health providers employed at national and sub-national levels of the system, by cadre

Percent of providers in primary care (e.g., primary health centers, clinics), secondary care (e.g., regional hospitals), tertiary care (e.g., major hospitals)

Percent of public health providers (full- and part-time) also working in private sector (e.g., with private health practices)

Annual number of emigrants (including in-country trained HRH and practicing HRH), by cadre

Managerial arrangements and structures

Decentralization

Quantitative

Characterization of decentralization to states (or provinces) and municipalities

Percent of ownership of public health facilities (e.g., PHCs, secondary/tertiary hospitals) by administrative unit (e.g., municipalities, states, regions, central health authority)

Percent of employment of public HRH by level of system (e.g., municipalities, states, regions, central health authority) and facility (e.g., PHCs, secondary/tertiary hospitals)

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Category/indicator (priority indicators for core performance management issues and objectives are in italics) *Possible data source(s)*

Qualitative

Characterization of Human Resources Management and decentralization
(by HRH cadre, level of facility, employment status)

<i>HRM function</i>	<i>Involved in decision-making (check all that apply)</i>						Key informant interviews: health sector experts (e.g., MOH personnel; external observers/ development partners; health facility managers); academic experts
	<i>National authority</i>	<i>Sub-national authority</i>	<i>Local authority</i>	<i>Facility personnel</i>	<i>Facility oversight body</i>	<i>Other</i>	
Recruitment							
Selection							
Posting							
Transfer							
Promotion							
Performance Assessment							
Discipline							
Termination							
Salaries							
Allowances							
Training							
Leave/sick days							

Institutional type and organizational culture

Qualitative

Typological assessment of hierarchical vs. market oriented^a

<i>Characterization</i>	<i>Description</i>	
Administrative unit	Most facility budgetary/input decisions controlled by higher authorities/subject to public sector rules	Key informant interviews: health sector experts (e.g., MOH personnel; external observers/ development partners; health facility managers); academic experts
(Semi-)Autonomous unit	Some decisions made at facility level (e.g., setting of certain fees; menu of services sold; managing budgetary line items) but other major decisions subject to public sector rules (e.g., HRH functions, procurement)	
Fully autonomous unit	Managers with nearly full decision rights over inputs, service mix/HRH, finance, spending; exempt from public sector rules within limits (e.g., must serve public patients)	
Private unit	Independent of public structures (though may receive public financing in part or whole)	

a. For further detail, see: Preker, A., & Harding, A. 2003. *Innovations in Health Service Delivery: The Corporatization of Public Hospitals*. Washington, DC: World Bank.

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<i>Category/indicator (priority indicators for core performance management issues and objectives are in italics)</i>	<i>Possible data source(s)</i>																											
<p>Other characterizations of organizational culture</p> <p>To what degree/how does the culture emphasize learning and problem-solving?</p> <p>How hierarchical vs. flat is the organization?</p> <p>How participatory is clinical decision-making between HRH cadres?</p> <p>To what degree (and how) is innovation/taking chances rewarded and to what degree (and how) does bureaucratic red tape inhibit innovation/taking chances?</p>	Key informant interviews: health sector experts (e.g., MOH personnel; external observers/development partners; health facility managers); focus group (e.g., health administrators and workers)																											
<p>Human resources management</p> <p>General</p> <p>Qualitative:</p> <p><i>Narrative of key elements of HRH management by HRH officials in public and private services</i></p>	Key informant interviews: health sector experts (e.g., MOH personnel; external observers/development partners; health facility managers); focus group (e.g., health administrators and workers)																											
<p>Recruitment and selection</p> <p>Qualitative</p> <p><i>Description of common recruitment practices, including: existence of geographical targeting (e.g., from urban/rural areas, from abroad); most important criteria used in selecting HRH candidates (e.g., formal qualifications, psychological test scores)</i></p> <p>Selection criteria, by employment status (e.g., permanent, contract) if applicable</p>	Key informant interviews: health sector experts (e.g., MOH HRH unit personnel; health facility managers)																											
<table border="1"> <thead> <tr> <th><i>Item (check all that apply)</i></th> <th><i>Yes</i></th> <th><i>Comments</i></th> </tr> </thead> <tbody> <tr> <td>Years of work experience</td> <td></td> <td></td> </tr> <tr> <td>Age</td> <td></td> <td></td> </tr> <tr> <td>Gender</td> <td></td> <td></td> </tr> <tr> <td>Educational qualifications</td> <td></td> <td></td> </tr> <tr> <td>Interview</td> <td></td> <td></td> </tr> <tr> <td>On-the-job performance</td> <td></td> <td></td> </tr> <tr> <td>Psychological or other test scores</td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> </tr> </tbody> </table>	<i>Item (check all that apply)</i>	<i>Yes</i>	<i>Comments</i>	Years of work experience			Age			Gender			Educational qualifications			Interview			On-the-job performance			Psychological or other test scores			Other			
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<p>Skill mix</p> <p>Quantitative</p> <p>Ratio of physicians to nurses and other cadre</p> <p>Ratio generalists/specialists, by cadre</p> <p><i>Existence of compulsory system for location, by cadre</i></p>	<p>International: WHO</p> <p>National: MOH</p> <p>Key informant interviews: health sector experts (e.g., MOH HRH unit personnel)</p>																											
<p>Promotion, career paths and perks</p> <p>Qualitative</p> <p><i>Characterization of career paths for clinical and administrative tracks</i></p> <p><i>To what extent are job descriptions generally existing/clear and do practicing HRH feel that they are useful?</i></p> <p><i>To what extent are career paths existing/clearly defined and do they motivate HRH to perform/stay in the workforce?</i></p> <p><i>What is the quality of the performance review process and (how) does it affect career advancement?</i></p>	Key informant interviews: health sector experts (e.g., MOH personnel; external observers/development partners; health facility managers); focus group (e.g., health administrators and workers)																											

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<i>Category/indicator (priority indicators for core performance management issues and objectives are in italics)</i>	<i>Possible data source(s)</i>
Supervision and monitoring	
Quantitative/qualitative <i>Results of supervision system surveys (e.g., number of visits per month, supportive vs. punitive, etc.)</i>	Peer review journals; "grey literature" (e.g., donor-funded project reports; Internet-accessible academic working papers)
Qualitative <i>Characterization of quality of supervisory systems</i>	
<i>Item (check all that apply)</i>	<i>Yes</i> <i>Comments</i>
Checklists generally used	Key informant interviews: health sector experts (e.g., MOH personnel; external observers/development partners; health facility managers); focus group (e.g., health administrators and workers)
Performance observation and comparison to standards generally occurs	
Supervisor generally provides immediate feedback	
Technical updates and guidance generally provided	
On-the-job training generally occurs if necessary	
Data generally used to identify areas of improvement	
Follow-up from previous meeting generally occurs (e.g., progress reports reviewed and updated)	
Other	
<i>To what degree is the frequency of visits seen as adequate?</i>	Key informant interviews: health sector experts (e.g., MOH personnel; external observers/development partners; health facility managers); focus group (e.g., health administrators and workers)
<i>To what degree is supervision "supportive" vs. "inspectorial"?</i>	
<i>To what degree do supervisors focus on administrative issues (e.g., hours of facility operation; facility maintenance; use of resources; inventories) vs. problem-solving of service delivery issues?</i>	
<i>To what degree are supervisors generally well-trained in supervisory functions?</i>	
<i>Characterization of facility/area oversight bodies (e.g., multi-sectoral/civil society-inclusive management boards, trusts, societies)</i>	
<i>Do oversight bodies have adequate resources and training to competently supervise/monitor HRH over which they have authorities?</i>	
<i>To what extent do oversight bodies provide real "client voice" and/or are effective vs. being perfunctory entities with little effectiveness?</i>	
<i>Characterization of governmental social marketing or other campaigns emphasizing provider performance (e.g., promotion of health services ombudsman, patient complaint hotlines/mechanisms)</i>	
<i>Do structures exist to encourage improved provider performance (e.g., health services ombudsman, patient complaint hotlines) and are there campaigns to encourage patients to avail themselves of those mechanisms?</i>	

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<i>Category/indicator (priority indicators for core performance management issues and objectives are in italics)</i>	<i>Possible data source(s)</i>
Organization's surrounding environment: working conditions	
Quantitative	
<i>Workload indicators</i>	
<i>Number of patients/unit of time (e.g., number of patients/day or hour)</i>	Peer review journal articles; "grey literature" (e.g., donor-funded project reports; Internet-accessible academic working papers)
<i>Number of procedures or number of services/worker/unit of time (e.g., number of annual surgeries/surgeon; number of annual deliveries/OBGYN)</i>	
<i>Results of surveys/evaluations of facility-level stockouts of essential medicines, forecasting and delivery evaluations, etc.</i>	
Qualitative	
<i>Perceptions of public health workers of workload in comparison to private sector and other professionals</i>	Focus group/interviews of different cadres of health professionals
<i>Key complaints by frontline workers on pharmaceuticals logistics management and availability supplies</i>	
Organization's surrounding environment: information systems	
Qualitative	
<i>Characterization of reporting and feedback systems for various information systems (e.g., Health Management Information Systems; Human Resources Information Systems)</i>	Key informant interviews: health sector experts (e.g., MOH personnel; external observers; health facility managers); focus group (e.g., health administrators and workers)
<i>To what degree is lower-level reporting timely and/or higher-level feedback provided?</i>	
<i>To what degree are data generated by information systems – particularly HRH-related information systems - used to inform decision-making?</i>	
<i>What mechanisms exist for verifying data accuracy (e.g., report auditing; surprise checks) and to what degree are they used effectively in practice?</i>	
Organization's surrounding environment: community accountability	
Qualitative	
<i>Characterization of facility/area oversight bodies (e.g., multi-sectoral/civil society-inclusive management boards, trusts, societies)</i>	Key informant interviews: health sector experts (e.g., MOH personnel; external observers/development partners; health facility managers); focus group (e.g., health administrators and workers)
<i>Do oversight bodies have adequate resources and training to competently supervise/monitor HRH over which they have authorities?</i>	
<i>To what extent do oversight bodies provide real "client voice" and/or are effective vs. being perfunctory entities with little effectiveness?</i>	
<i>Characterization of use of citizen-oriented accountability mechanisms (e.g., use of citizen report cards; mechanisms for feedback)</i>	Key informant interviews: health sector experts (e.g., MOH personnel; external observers/development partners; health facility managers); focus group (e.g., health administrators and workers)
<i>What kinds of institutionalized mechanisms for client feedback/oversight exist (e.g., citizen report cards, ombudsman bodies) and how do they affect provider performance?</i>	

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Category/indicator (priority indicators for core performance management issues and objectives are in italics)

Possible data source(s)

Regulation

Qualitative

Characterization of facility accreditation rules and regulations

What official rules/regulations exist governing facility accreditation?

How effectively are rules/regulations governing facility accreditation enforced and/or to what degree do facilities comply with the rules/regulations?

To what degree do facility accreditation rules/regulations improve facility/health worker performance?

Key informant interviews:
health sector experts (e.g., MOH personnel; external observers/development partners; health facility managers); focus group (e.g., health administrators and workers)

Characterization of provider licensing and certification/re-certification rules and regulations (and/or authorized scopes of practice), by labor market sector

What official rules/regulations exist governing provider licensing and certification/re-certification?

How effectively are rules/regulations governing provider licensing and certification/re-certification enforced and/or to what degree do providers comply with the rules/regulations?

To what degree do provider licensing and certification/re-certification rules/regulations improve health worker performance?

Key informant interviews:
health sector experts (e.g., MOH personnel; external observers/development partners; health facility managers); focus group (e.g., health administrators and workers)

Characterization of policies on dual practice

What official rules/regulations exist governing dual public/private practice?

How effectively are rules/regulations governing dual public/private practice enforced and/or to what degree do providers comply with the rules/regulations?

To what degree do dual practice and/or policies regarding dual practice affect health worker performance?

Key informant interviews:
health sector experts (e.g., MOH personnel; external observers/development partners; health facility managers); focus group (e.g., health administrators and workers)

Characterization of provider sanctioning mechanisms (e.g., malpractice), by labor market sector

What official sanctioning mechanisms exist to regulate provider behavior?

How effectively are sanctioning rules/regulations enforced and/or to what degree do providers comply with the rules/regulations?

To what degree do sanctioning mechanisms and/or policies regarding sanctioning mechanisms affect health worker performance?

Key informant interviews:
health sector experts (e.g., MOH personnel; external observers/development partners; health facility managers); focus group (e.g., health administrators and workers)

Capabilities and motivation

Competence ("Can do")

Knowledge

Quantitative

Highest professional training levels by percent of for each cadre

Results from Knowledge, Attitude and Practices surveys of specific health worker cadres

Evaluation Reports on short-term in-service training

MOE, MOH, development partners; peer review journal articles; "grey literature" (e.g., donor-funded project reports; Internet-accessible academic working papers)

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<i>Category/indicator (priority indicators for core performance management issues and objectives are in italics)</i>	<i>Possible data source(s)</i>
Skills	
Quantitative	
<i>Average number of years in profession for each cadre</i>	
Intrinsic motivation ("Will do")	
Quantitative	
<i>Scores on psychological testing</i>	
Qualitative	
<i>Characterization of overall competence and motivation, by HRH cadre/labor market sector/organizational affiliation</i>	Key informant interviews: health sector experts (e.g., MOH personnel; external observers/development partners); focus group (e.g., health administrators and workers)
Education	
Pre-service	
Quantitative	
<i>Number of pre-service training institutions, by degree offered (e.g., MD, nursing (any degree))</i>	MOE; MOH
<i>Gross/net enrolment/graduation rates of pre-service training institutions, by cadre</i>	
<i>Percent of annual pre-service graduates trained in capital, regional training institutions, rural training institutions, by cadre</i>	
<i>Ownership characteristics of pre-service training institutions, by degree offered (e.g., percent of schools offering medical degree, nursing degree(s), etc. owned/operated by MOE, MOH, private sector, etc.)</i>	
<i>Indicators of pre-service trainee quality (e.g., mean Grade Point Average or equivalent compared to trainees in other</i>	
<i>Number of and geographic distribution of in-service training institutions/centers, by ownership status (e.g., gov't, private)</i>	
Qualitative	
<i>Characterization of general condition of pre-service education of health professionals (by HRH cadre)</i>	MOE, MOH, development partners
<i>What is the overall quality of HRH trainee candidates compared to other comparable sectors (e.g., education)?</i>	
<i>What is the overall quality of education received by HRH candidates (by HRH cadre, public vs. private, national vs. regional training institutions, etc.)?</i>	
Health workforce performance: intermediate objectives (quantitative)	
Access/Availability	
<i>Patient waiting time</i>	MOH, development partners; peer review journal articles; "grey literature" (e.g., donor-funded project reports; Internet-accessible academic working papers)
<i>Staff ratios</i>	
<i>Staff attendance/absenteeism rates</i>	
Quality	
<i>Any data on quality of care and health outcomes for specific health problems</i>	
<i>Prescribing practices</i>	
<i>Protocol adherence</i>	
<i>Rates of readmission, cross-infections and nosocomial infections</i>	

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<i>Category/indicator (priority indicators for core performance management issues and objectives are in italics)</i>	<i>Possible data source(s)</i>
<p><i>Productivity/efficiency</i></p> <p><i>Basic utilization rates (occupancy rates, patient contacts per provider) per type of HRH, by type of facility, by public vs. private</i></p> <p><i>Any specific studies of efficiency (e.g., any change in utilization rates when salaries are increased)</i></p> <p><i>Professional practice</i></p> <p><i>Trends in absenteeism</i></p> <p><i>Trends in malpractice</i></p> <p><i>Trends in labor market balance/shifts from public to private employment</i></p> <p><i>Trends in dual practice/shifts in multiple job holdings</i></p>	
<p>Health workforce performance: ultimate objectives (quantitative)</p>	
<p><i>Health status</i></p> <p><i>Trends and distribution of IMR, CMR, MMR</i></p> <p><i>Trends and distribution of specific disease incidence for communicable and non-communicable diseases</i></p>	<p>MOH, development partners; peer review journal articles; "grey literature" (e.g., donor-funded project reports; Internet-accessible academic working papers)</p>
<p><i>Patient satisfaction</i></p> <p><i>Trends from survey data (e.g., patient satisfaction, perceived/objective quality of care)</i></p>	
<p><i>Financial risk protection</i></p> <p><i>Trends in OOP payments</i></p>	

Environmental Benefits Statement

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The health workforce is the foundation of care and affects quality and outcomes; human resources for health (HRH) constitutes the largest portion of the health care budget of most countries. Latin America and the Caribbean has been challenged by imbalances in workforce composition, distribution, and skill mix, as well as by variations in productivity and quality.

The Health Workforce in Latin America and the Caribbean: An Analysis of Colombia, Costa Rica, Jamaica, Panama, Peru, and Uruguay provides an update on HRH in these six countries. The discussion is structured around five key areas of the workforce: financing, organization, management, regulation, and performance.

- **Financing:** The authors present the variety of contracting mechanisms, salary levels, and financial incentives, and their roles in attracting and retaining health workers.
- **Organization:** The countries have made progress toward achieving HRH targets and making education more accessible. However, the absorption capacity remains limited for graduates, the primary health care focus of training programs needs to be strengthened, and the strategies to encourage rural service have not effectively addressed the distribution gap of health workers.
- **Management:** All six countries have adopted the World Health Organization's Global Code of Practice on the International Recruitment of Health Personnel to recognize foreign-trained professionals to help address shortages and fill gaps in rural and remote areas. However, the countries continue to struggle with implementing self-sufficiency policies to build the capacity to meet needs. Such policies include promotion plans, nonmonetary incentives, and personnel for recruitment and eventual placement.
- **Regulation:** The countries are working to reduce precarious and unprotected employment, introduce safety policies to decrease occupational diseases and workplace accidents, and enact legislation to resolve disputes.
- **Performance:** Mixed results have been achieved in health outcomes, access and availability, quality of care and patient satisfaction, professional practice, and productivity and efficiency.



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