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To cite this article: Ken Hashimoto, Lauré Adrien & Sunil Rajkumar (2020) Moving Towards Universal Health Coverage in Haiti, Health Systems & Reform, 6:1, e1719339, DOI: [10.1080/23288604.2020.1719339](https://doi.org/10.1080/23288604.2020.1719339)

To link to this article: <https://doi.org/10.1080/23288604.2020.1719339>



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Published online: 26 Feb 2020.



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RESEARCH ARTICLE



Moving Towards Universal Health Coverage in Haiti

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ABSTRACT

Haiti announced in 2018 its aim to achieve universal health coverage. In this paper, we discuss what this objective means for the country and what next steps should be taken. To contextualize the notion, we framed Haiti en route to the 2030 goal and analyzed qualitatively the status quo in terms of geographic, financial, and service access. For each dimension, we focused on the context, the government's policies and political agendas, their implementation progress, and key influential factors. Our analysis found little progress and numerous challenges. Geographic access was limited due principally to the insufficient number of facilities, difficulties in reaching health facilities, and local customs. Financial coverage was low because of the government's insufficient budgets, inefficient budget allocation, and ineffective management. Service access also had room for significant improvement for a lack of basic infrastructure and resources, gaps between the essential service package guidelines, health professionals' skills, and the needs, as well as deficiencies in people-centered care. These factors affected not only health service coverage but also its quality. We found that the root causes of these issues were composed of unstable financing mechanisms, opportunistic resource allocation, and ineffective management control systems. We suggest that to overcome these issues and achieve universal health coverage with decent service quality, Haiti's health system needs to be reformed by implementing strategic financing, decentralized management systems, and community engagement in primary health care.

ARTICLE HISTORY

Received 16 July 2019
Revised 12 January 2020
Accepted 18 January 2020

KEYWORDS

universal health coverage; Haiti; health system; policy; access

Introduction

Universal health coverage (UHC) is an interest of all countries, as an essential component of the United Nation's Sustainable Development Goals.¹ The global initiative provides momentum and support. Yet every country needs to find its own pathway to reach the goal because of differences in many factors including health systems, resources, needs, demography, geography, and culture. Importantly the aim is not only to offer affordable health services to everyone by 2030, but also to build a health system that sustainably provides these services beyond the target year. Realizing UHC, therefore, requires a strategic approach as well as continuous efforts to strengthen health systems.

Haiti is a challenging country to realize UHC. The most impoverished country in the western hemisphere has many health issues to overcome and systems to build (Table 1). Following the earthquake in 2010, which killed over 220,000 people, Haiti announced a strategic development plan to become an emerging country in 2030 and its implementation guideline for the health sector.^{13,14} These plans, however, have rarely been implemented having passed 10 years. As a baseline for measuring

UHC, WHO and the World Bank presented the Universal Health Service Coverage index for each country and gave Haiti 47 out of 100 points ranking it as 139th.¹⁵ For the Healthcare Access and Quality Index, Haiti scored 32 out of 100 points and placed as 168th.¹⁶

Many challenges remain, but so do willingness and opportunities for improvement. The global mandate of UHC was adapted and presented as Haiti's vision by the Health Minister during a health sector meeting in May 2018. It is now the country's priority policy. One essential question at this initial stage is "what does UHC mean for Haiti?" Contextualizing the vision will facilitate discussion of what the next steps are for Haiti to take. These are the central questions of this paper and will be addressed through our analysis of Haiti's health policies, systems and services, and our discussion of potential strategies.

Approach

We examined Haiti's route to the 2030 vision of UHC through qualitative analysis of the status quo, utilizing

Table 1. Basic country data and health indicators of Haiti

Population, 2018 ²	11.1 million
Geographic area	27,750 km ²
Human development index, 2018 ³	0.498 (168th of 189 countries)
GDP per capita, 2017 ⁴	\$729 USD
Life expectancy at birth, 2017 ⁵	64 years
Maternal mortality ratio per 100,000 live birth, 2017 ⁶	529
Neonatal mortality rate per 1,000 live birth, 2017 ⁶	32
Under 5 years mortality rate per 1,000 live birth, 2017 ⁶	81
Under 5 years malnutrition rate, 2017 ⁶	Malnourished 22%, of which 8% severely malnourished
Top 5 DALYs in 2017 (IHM) ⁷	<ol style="list-style-type: none"> 1. Neonatal disorders 2. Lower respiratory infection 3. Diarrheal diseases 4. Congenital defects 5. Road injuries
Vaccination coverage of under 2 years with all diphtheria, tetanus and pertussis, 2017 ⁸	64%
Dispensaries density per 10,000 inhabitants, 2017 ⁸	0.3
Health centers density per 10,000 inhabitants, 2017 ⁸	1.2
No. of hospital beds per 100,000 inhabitants, 2017 ⁶	6.9
No. of nurses, midwives and physicians per 100,000 inhabitants, 2017 ⁶	6.3
Recent notable disasters	
<ul style="list-style-type: none"> • Earthquake, 2010^{9,10} 	222,000 deaths, 313,000 homes destroyed or damaged, over 50 health facilities collapsed
<ul style="list-style-type: none"> • Post-earthquake cholera outbreaks, 2010–2014¹¹ 	8,767 deaths, over 719,000 infected cases
<ul style="list-style-type: none"> • Hurricane Mathew, 2016¹² 	546 deaths, 210,000 homes destroyed or severely damaged

the WHO model of geographic access, financial access, and service access.¹⁷ While other UHC analysis frameworks, including the UHC service coverage index and the essential attributes of health systems performance, address related dimensions more extensively, we selected the WHO model due to limited availability of data and methodological simplicity.^{18,19} For each component, we focused on the context, policies and political agendas related to UHC, their implementation progress, and key influential factors. Policies are those approved by the Haitian congress, whereas political agendas are propositions of the current government. Key influential factors include causes, bottlenecks, and surroundings which would substantially affect implementation progress in terms of coverage and quality by interrupting the flow of resources, information, and activities throughout the health systems and services.

Our main sources of information were published documents and reports of the Haitian Ministry of Health (MoH) and international organizations, as well as the authors' observations and discussions with MoH employees. We found very few review papers of Haiti's health policies, systems, and services, which is also a motive of our publication. We conducted non-structured interviews on accessibility and functionality of health services with medical professionals and administrative staff at the national, departmental, and health center levels over more than 10 occasions during 2017 and 2018. Because of the limited availability and reliability of health data in Haiti, some of our information lacks numerical details.

We identified key influential factors for each of geographic access, financial access, and service access from the collected information. Subsequently, we performed a root cause analysis to determine their cause–effect relationships, structure, and root causes.²⁰ Based on the findings, we conducted a gap analysis to formulate strategies that would accomplish and sustain UHC by strengthening the foundation of health systems.²¹

Status Quo

Geographic Coverage

The MoH administers 388 public health facilities, contracts 168 public-private organizations, and licenses 493 private hospitals or clinics.²² Geographic access to health service is limited especially for the rural population. This limitation is attributable principally to: insufficient number of facilities, difficulties in reaching the facilities, and local customs.

There is a lack of health facilities. Particularly, dispensaries with nurses or auxiliary nurses are too few to cover remote villages (Table 1). Indeed 37% of the population find distance as a reason not to seek health care.⁶ Despite that two-thirds of the health facilities are located in rural areas, 125 out of 571 communal sections lack a health service.²³ In 2017 the government announced a political agenda to establish 122 health facilities focusing on those unfilled communal sections. As of May 2019, less than 20% of the target were met. Progress is slow due to scarce funding of the MoH. The fact that the construction of health facilities in remote areas takes extra time, effort,

and resources, hinders investment by the government and donors who tend to seek visible impact and cost-performance.^a Some health facilities already exist but lack staff. At times health professionals refuse to be transferred to remote areas or tend to be absent after placement.^a There are also frequent turnover and migration of medical professionals.^a These phenomena may partly result from delayed salary payment by several months and insufficient remuneration even to meet their basic family needs.

There are obstacles for patients to reach health facilities. In rural Haiti, many remote villages are accessible only on foot. Roads connect larger villages and towns but are unpaved and often inaccessible when the rivers are flooded.^{24,a} While moto-taxis are found in most main roads, public or collective transports are rare.^a Relatively costly moto-taxis are affordable only for some people.^a National ambulance service is available in certain zones of two departments.^a In the remaining eight departments, several facilities have an ambulance donated by external stakeholders but they usually charge fees to the users to pay for the driver, fuel, and maintenance.^a

There is an alternative service closer to the rural population. Traditional medicine is widely practiced in Haiti.^{25,26,a} People in remote areas especially tend to seek a healer for health problems and a traditional birth attendant for delivery, who live in their village or close by.²⁷ They can be more expensive than the public health service but are physically and culturally more accessible for the population. Service provision by these practitioners is uncontrolled, hence the quality remains disputable.

Financial Coverage

Users pay for health services in Haiti. It is a financial burden for the 49% of the population, who claim “having no money” as an “obstacle” to seek health care.²⁸ Households which spend over 10% of their overall expenditures on health care was on the increase from 9.4% in 2012 to 11.5% in 2013; notably deteriorating among the most economically deprived quintile from 11.6% to 18.2% during the same period, while alleviating among the wealthiest quintile from 9.5% to 4.5%.²⁹ Such financial burden to the population can be explained by the government’s insufficient budgets, inefficient budget allocation, and ineffective management.

The government’s health budget is notably low in Haiti: less than half the average of the Latin American and Caribbean countries.³⁰ The total health expenditure, \$59.5 billion USD in 2013–2014, consisted of donor funds (56.7%), people’s out-of-pocket payment (30.1%), the government budget (9.7%), and private sector’s spending (3.5%).²⁷ The proportion of

the national budget allocated for health fell from 16.6% in 2004 to 3.9% or \$7 USD per capita in 2018, due to prioritization of other sectors and to marked inflow of international funding for health following the 2010 earthquake. Donor funding however declined from \$44 USD per capita in 2011 to \$15 USD in 2016.²⁶ The government aims to gradually increase the budget proportion for health up to 15% and allocated 7% for the 2019–2020 fiscal year.^a But this proportion may decline if government revenues are insufficient. In 2018–2019 the budget allocated to health dropped from 4.8% to 3.9% after revenue evaluation.^a

Available health budgets are allocated inefficiently, limiting population coverage. The MoH in 2013–2014 expended 57% of the budget for curative care and 33% for preventive care.³¹ Also, 80% of medical staff are assigned to urban health facilities, where 50% of the population dwell.³² For the construction of the National University Hospital in Port-au-Prince, the Haiti government agreed to invest \$33.3 million USD with the co-financers, US and France.³³ Yet its completion and subsequent running cost are of serious concern.^{a,34} Some hospitals constructed or reconstructed after the 2010 earthquake by the international community continue to be financed externally.^a Other facilities where international organizations have left are managed by the MoH but at a considerably reduced scale if not closed.^a

Health budgets are rarely managed optimally. In recent years, although annual operation plans with budgets were prepared by the MoH’s different programs and offices and approved by the MoH headquarters and by the congress, the funds were rarely deposited to the assigned accounts.^a Because of this lack of budgeted funds, health facilities have had to manage services by collecting user fees and with donor funding if available.^a The salary payment mechanism is another issue. In 2018 the MoH reclaimed a total of \$3 million USD worth of paychecks from the preceding 10 months by switching the payment method of depositing to the employee’s bank account to handing a paycheck directly at their accounting offices.³⁵ Ghost workers are no longer paid, but real workers now travel monthly to the departmental capital to collect their paycheck absenting their workplaces. Widespread corruption profoundly obstructs the optimal use of financial resources.^{36,37}

Service Coverage

Service content and quality have room for significant improvement in Haiti. Primary care of good quality is

accessible only by 23% of the population: 46% in urban areas and 5% in rural areas.³⁸ In 2016 the Haiti government endorsed the essential service package (PES) which included a service range, a list of drugs and equipment, and the minimum number of staff required for each care level. Implementation progress is stagnant due to a lack of basic infrastructure and resources, gaps between the PES, health professionals' skills, and the needs, as well as underdeveloped people-centered care.

Health facilities need infrastructure and resources to operate. Poor facility and service delivery in Haiti diminish the service utilization.^{39,40} Of 907 health facilities surveyed in Haiti, only 6% were found fully ready to provide minimum essential services: others were partially equipped with the necessary medicines (13%), equipment (54%), and infrastructure (7%).⁸ Of 38 hospitals which cared for critically ill patients, merely 39% had an ICU, 21% had physicians with formal training for emergency or critical care and 13% had nurses with such formal training.⁴¹ Most rural health centers and dispensaries are equipped with a solar powered refrigerator for the cold chain but rarely with a functioning power system to constantly supply electricity.^a Physicians and nurses have performed consultation, operation, and delivery at night using their cellphone lights.^a Departmental hospitals use electric generators but the administration is heavily affected by high fuel costs.^a Health facilities are provided with the materials for malaria, HIV/AIDS, and tuberculosis free of charge from the Global Fund, but purchase other supplies and drugs from the MoH storage and registered distributors when possible.^a Understandably stock-outs are common in health facilities in Haiti.^{a,42}

There are gaps between the PES, skills of health professionals, and the needs. The PES specifies the standards to implement but not how to deliver them. Training programs for medical staff are organized only when external funding is available. The first handbook for nurses was only developed in 2019. The PES also reduced service content in complicated manners.⁴³ For example, the PES regulates that all normal deliveries should take place in urban health centers or hospitals where physicians reside. Abnormal deliveries are expected to be carried out in the departmental or national hospitals. Because pregnant women in remote villages often cannot afford to travel and stay at urban health centers or hospitals, they have no choice but to give birth in their home villages with traditional birth attendants.^a

People-centered care is rarely practiced. According to one study, less than 10% of primary care facilities in Haiti provided users with results of the diagnosis of children to their caregivers and information on the adverse effects of supplements.³⁸ Merely 2% of the facilities gathered feedback from users.³⁸

Communication between health staff and the community is often limited, due partly to a lack of health workforce.⁴² Most facilities are disconnected with traditional birth attendants, who are responsible for 58% of deliveries in the country,⁶ despite statements from health professionals that they were collaborative when communication was active.⁴⁴

Root Causes

Most of the issues presented above for geographic, financial, and service access are consequences or symptoms of systemic problems that have root causes. We focused on systemic components of causes such as policies, structures, and compositions rather than abilities, efforts, and performance of individuals, which are indispensable to achieve and sustain UHC with decent quality but are often context- or person-specific and vulnerable to personnel changes. The analysis identified three root causes after questioning fundamental reasons over three consecutive times: unstable financing mechanisms, opportunistic resource allocation, and ineffective management control systems (Figure 1).

Unstable Financing Mechanism

The MoH currently has no means to continually obtain sufficient funding from the government's budget. Requested health budgets are revised and reduced by the cabinet. There is no policy that defines the minimum proportion of the national budget allocation for health. Even approved budgets depend on the government's actual revenue and administration of the Ministry of Finance, which transfers the budget to the MoH and pays all public employees. The MoH's goal to achieve UHC may not be politically salient among Haiti's congressmen, and thus remains vulnerable to budget cuts. Donor funds have substituted for the government's funds but are also volatile.

Opportunistic Resource Allocation

Annual operation plans budgeted and congressionally approved are rarely respected in Haiti. Most MoH budgets are allocated to urban curative care or to central programs, not to primary health care (PHC) services indispensable for UHC. To allocate limited budgets, certain activities are prioritized but without clear criteria or rationale based on a holistic vision. Human resources for health are also allocated using similar principles in Haiti. Temporary health personnel are contracted only for a few months period when funding is available.^a This irregular staffing also causes

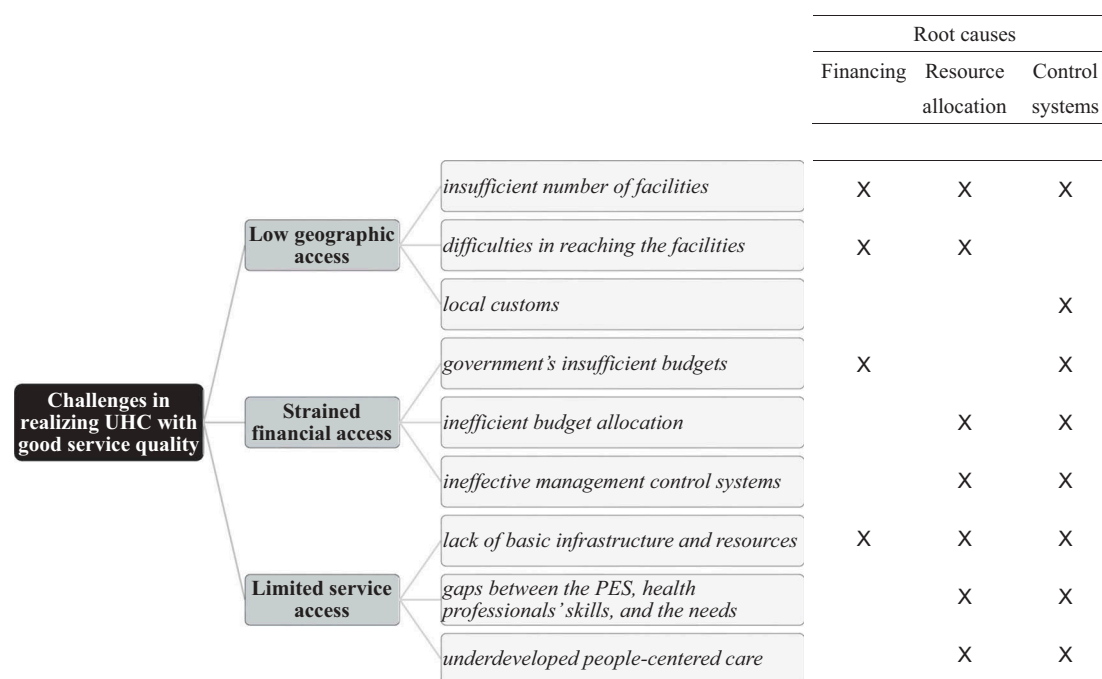


Figure 1. Relation between causes and root causes for challenges in realizing UHC in Haiti

high turnover and staff absence, affecting the health service coverage and quality.^a

Ineffective Management Control Systems

Haiti's health system lacks effective mechanisms to control performance in terms of inputs, outputs, and outcomes across different administrative levels. Managing inputs such as budgets, personnel, equipment, materials, and supplies, requires inventory and functionality monitoring. But such systems are not well established in Haiti, making the health sector prone to corruption and funders to invest through external agencies.^a For outputs, activities need to be programmed based on the local needs and carried out according to plans and regulations. Evidence-based decisions, however, take place only partially: a study found that 46% of health facilities operate without any data collection system.⁸ But donor supported health services, such as Results-Based Financing, manage technical and administrative data as well as service quality, because of management control by project regulations and constant supportive supervision.⁴⁵ Outcomes (health status of the population) are followed up on a project basis but rarely used as part of routine epidemiological analysis. Structurally the national health information system is an assemblage of various information systems designed and implemented by donors for their projects.^a Integration of these different information systems has been attempted but yet to be accomplished.

A Way Forward

Since Haiti's vision is to achieve UHC by strengthening the health system, not just fixing problems, a fundamental reform is required. Moreover, lessons from the 2010 devastating earthquake, following nationwide cholera outbreaks and frequent destructive hurricanes, indicate that resilience must be a built-in feature of the health system.⁴⁶ Based on the status quo, the structure of influential factors, and the root causes, we formulated three key strategies which would significantly move Haiti towards UHC by acting as change agents and core functions in Haiti's health systems: strategic financing, decentralized management systems, and community engagement for PHC (Figure 2).

Strategic Financing

Haiti needs to establish strategic financing mechanisms to constantly secure sufficient health budgets, preferably independent of volatile donor funding. While it is important to develop a policy to set a minimum proportion of the national budget to allocate for health, the government should also create other income sources. Earmarked financing has shown promising results in other countries.^{17,47} In the case of Haiti where the government is deeply in debt and the majority of the population live in poverty, the principal source can be taxes or license fees for foreign entities. In fact, import tariffs declined in Haiti in the mid-1990s following the

structural adjustment period. For example, the tariff for rice dropped from 50% to 3%.⁴⁸ White rice, when consumed excessively, can contribute to non-communicable diseases, and thus can be a target product. If sufficient funds are sustainably pooled, national health insurance may also be introduced. For such a large-scaled intervention, the government may consider, for instance, selling lottery tickets domestically and abroad in particular where the Haitian diasporas reside, since the lottery is a popular game among Haitians. All these strategies, however, require a monitoring mechanism with transparent platforms and supporting taskforces composed of governmental and nongovernmental stakeholders such as the media, research institutes and international agencies, to avoid corruption and strengthen management capacity.

Decentralized Management Systems

By shifting more management responsibilities and budgets to the Departmental Health Offices, more geographic and service coverage can be achieved. Managerial decisions made locally on resource allocation and reallocation, in particular, would improve responses to health-care demands of the population.^{49–51} Such efficient systems require: 1) an integrated information management platform which takes account of inputs (e.g. policies, infrastructure, resources), outputs (e.g. service delivery, quality, coverage), and outcomes (e.g. morbidity, mortality, health status), 2) clarification of duties of all employees and their positions in the ministerial command line, and 3) continuous technical and managerial capacity building of frontline health workforce with systematic monitoring and supportive supervision by the Departmental Health Offices and the MoH national programs.^{49,50,52–54} While management responsibilities are decentralized, the fiscal system should remain centralized to ensure fair distribution of funding to primary

care facilities in need and to focus on prevention.⁵¹ Some models of such systems are already developed by Results-Based Financing projects.^{45,55}

Decentralized management systems will require further efforts to integrate the vertical streams, manage service quality, and improve governance at all levels. As specific programs are funded by particular donors (e.g. vaccination by GAVI, HIV/AIDS by PEPFAR, and malaria by the Global Fund), their agendas need to be integrated or cooperatively implemented. Service quality management by means of regulation, training, and monitoring is indispensable to continually improve skills, infrastructures, and resources, especially in Haiti's context where the majority of health service is delegated or licensed to non-governmental or private health-care providers.^{49,52} It is vital to enhance governance and prevent corruption, by establishing transparent financial systems and capacity building of personnel at local and central levels for planning and managing resources, as well as enforcing anti-corruption policies and laws, community monitoring, and audits.^{49,50,56}

Community Engagement in PHC

Community engagement will lead to higher effective coverage, since the decentralization of management systems itself is not sufficient to build the link between health services and the communities.⁴⁹ To begin, it is fundamental to understand the community including health issues, lifestyles, values, culture, and key stakeholders. Many respected villagers, such as healers and traditional birth attendants, currently work in isolation from the public health service. Knowledge sharing and training with the common objective to improve the people's health can lead to mutual learning, braced responsiveness and higher service quality.^{25,26} For example, herbal medicines frequently consumed in Haiti can be acknowledged and encouraged once research teams

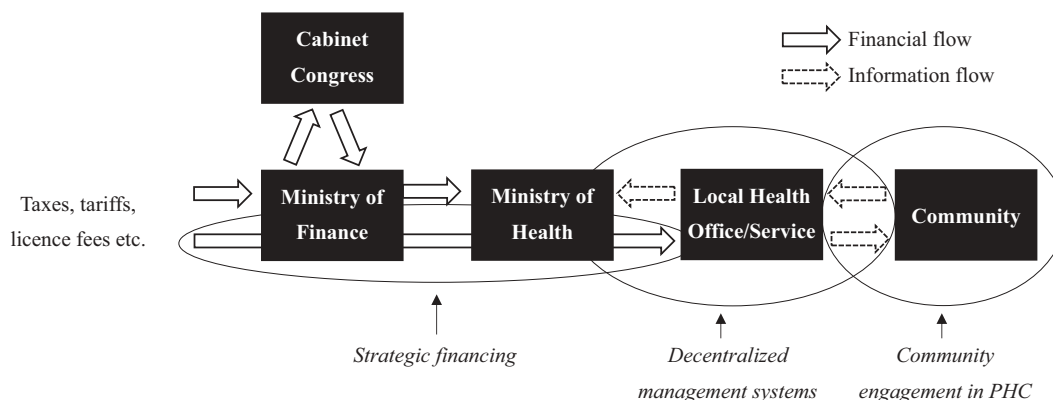


Figure 2. Target areas of strategies to strengthen Haiti's health system towards UHC

approve.^{57–59} Also, traditional birth attendants can be trained in basic knowledge and skills.²⁷ Efforts to build trust with the community will enhance their engagement in health service, and thus will augment population coverage and improve overall service quality.

Conclusion

Haiti is a country with many challenges but also with great potential. Geographic access, financial access, and service access for health are all limited because the country lacks functional mechanisms to finance services, optimize resources, and provide effective management. Moving towards UHC will require a health system reform with interventions that assure strategic financing, decentralized management systems, and community engagement in PHC. High-level commitment is imperative, first though, to overcome the major political instability including the recurrent absence of the cabinet and social unrest, which have occasionally prompted a humanitarian crisis.⁶⁰ Then, the Head of State may declare UHC as a national priority presenting a reform plan which will help trigger a paradigm shift that is needed to move Haiti towards the 2030 goal of universal health coverage.

Note

- ^a Interviewees' comments and responses during non-structured interviews and authors' observations.

Acknowledgments

We thank all employees of the Haitian Ministry of Health who provided information, experience and feedback and Professor Michael Reich of Harvard T.H. Chan School of Public Health for his comments on previous drafts of this paper.

Disclosure of Potential Conflicts of Interest

No potential conflict of interest was reported by the authors.

Funding

The Japan International Cooperation Agency, the Haitian Ministry of Health, and the World Bank financed travel expenses of the authors.

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