HUMAN RESOURCES FOR HEALTH AND THE COVID-19 RESPONSE IN THE CARIBBEAN

Caribbean Subregional Program Coordination

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Human Resources for Health and the COVID-19 Response in the Caribbean

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FOREWORD

This is a time of major challenges, as well of opportunities. The COVID-19 pandemic has proven the need for resilient health systems that can navigate through a dynamic and sometimes threatening environment with adequate and timely responses. The pandemic has also demonstrated the importance of human resources for health to face this and other health emergencies. Countries and health institutions must have the capacity to respond with human resources that are sufficient in quantity and possess the skills and capacities necessary to meet the needs of the population in a timely, relevant, efficient and effective manner. Effective management of human resources will allow health systems to respond in a timely manner, improve health care outcomes, rationalize the use of resources and reduce the stress on staff.

The Caribbean Subregion is no stranger to these needs. The Caribbean Roadmap for Human Resources for Universal Health 2018-2022 was developed by a joint effort of 15 CARICOM Member States. Developed with the technical support of PAHO, the roadmap sets out a comprehensive approach at the subregional level that enables countries to develop common standards and guidelines for HRH planning and policy development. During the pandemic the Caribbean subregion has taken several measures to improve the response to the coronavirus from the HRH perspective, building on the roadmap priority areas. PAHO considered it fundamental to identify, systematize and analyse the interventions and policy development around HRH in support of the COVID-19 response. The present document will contribute to understand the response in the Subregion, to the exchange of experiences and lessons learned, and to the development of public policy in support of CARICOM countries and the Caribbean Cooperation in Health IV (CCHIV).

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1. INTRODUCTION

On 31 December 2019, the World Health Organization (WHO) China Country Office was informed of cases of pneumonia of an unknown etiology detected in Wuhan City, Hubei Province of China. By January 7, 2020 a new type of coronavirus was isolated having been associated with a seafood market in Wuhan City. Following the exponential growth in cases and deaths, on 30 January 2020, WHO declared the COVID-19 outbreak a public health emergency of international concern under the International Health Regulations (IHR). On 11 February, WHO named the disease COVID-19, short for "coronavirus disease 2019". On 11 March 2020, WHO characterized COVID-19 as a pandemic, due to the speed and scale of transmission.

The first cases in Latin America were confirmed in Brazil on 26 February 2020. COVID-19 reached the English-speaking Caribbean on the island of Jamaica on 10 March 2020. By August 2020, over 9.7 million cases of COVID-19 have been confirmed in the Region of the Americas and more than 365,000 people have died of the coronavirus since the start of the pandemic in January[1]. By 18th August, the 20 CARICOM members and associate members had 15,555 confirmed cases and 325 deaths[2].

Health care workers are essential to the COVID-19 response and one of the most affected groups. The COVID-19 pandemic exacerbated an already existing shortage of health care workers in the Caribbean. The health workers density ranged from a low of 11% in Haiti to 100% in The Bahamas, Suriname and Trinidad & Tobago. The mean for the Caribbean territories was 68%.[3] Migration of nurses affects the Subregion, 60% of nurses of the Caribbean indicated that they would migrate if given the opportunity[4]. Migration continued or could have increased in some countries during the pandemic. According to WHO, by June 2 Bermuda reported 16 cases among HCW, Aruba 12 cases, Saint Lucia and Jamaica 7 cases. The percentage of cases among HCWs varied between countries, reaching 23% of total cases in Bahamas early in the pandemic (one of the highest in the Region of the Americas), 14.3% in Antigua and Barbuda, 15.6% in Bermuda (WHO Global Statistics, 2020). Jamaica reported 10 front line HCWs and 20 Ministry of Health workers, who tested positive to the coronavirus.

The aims of the present document are to share information related to the COVID-19 response and health workforce in the Caribbean countries, to facilitate monitoring of

[1] PAHO. COVID-19 PAHO/WHO Response, Report 19 (3 August 2020).

[2] UWI. COVID-19 Surveillance for Caribbean Region. Regional Briefing (18 August 2020)

[3] WHO, Primary Health Care on the Road to Universal Health Coverage: 2019.

[4] PAHO. Health workers perception and migration in the Caribbean. PAHO, 2019.

HRH policy interventions related to COVID-19, and, to inform on HRH policy development in terms of lessons learned and areas for improvements.

2. METHODS

A short on-line questionnaire was developed based in the PAHO *Checklist for the Management of Human Resources for Health in response to COVID-19*[5] and delivered to PAHO Health Systems and Services Advisors (HSS) and Ministries of Health (MoH) from the Caribbean through PAHO Country Offices, using Microsoft Forms® platform. The questionnaire included eight (8) closed-ended questions on: Human Resources for Health (HRH) staffing and scaling measures; existing and new legal framework, norms, agreements relating to staffing and mobilizing of health care workers (HCWs); existence of a surveillance protocol for HCWs at risk of exposure; and, existence of a national plan for training HCWs for the COVID 19 response. The average response time was calculated in 7 to 10 minutes.

Additionally, interviews were carried out by PAHO Advisor in Human Resources for Health for the Caribbean in those countries that responded to the questionnaire. The interview covered the following main topics:

1. General information on COVID-19 and HSS response
2. Measures taken related to HRH during COVID-19 response
3. Legal framework: emergency decrees, existing norms.
4. First level of care health care workers and COVID-19
5. Plans for training

Interviewees included MoH officials (CMOs, HRH focal points), PAHO HSS Advisors and HRH focal points from countries of the Caribbean Subregion[6]. The interviews were recorded, with the oral consent from the interviewees. The average response time was 28 minutes. The interview´s notes were sent to all participants for revision and comments. The questionnaire and the interviews were applied between the months of May and July 2020.

3. SITUATION ANALYSIS OF COVID-19

A total of 12 countries responded to the online questionnaire and 9 countries participated in the interview (Table 1). Fifty percent (50%) of the participants and interviewees were officials from the ministries of health (CMOs, health planners, national epidemiologists and coordinators) and the other half were PAHO HSS advisors or focal points.

[5] PAHO. Checklist for the Management of Human Resources for Health in response to COVID-19. 2020.

[6] Participation depended on the availability of the countries at a time when they were overburden by the response to COVID-19.

Table 1. Participating countries: Questionnaire and interview.

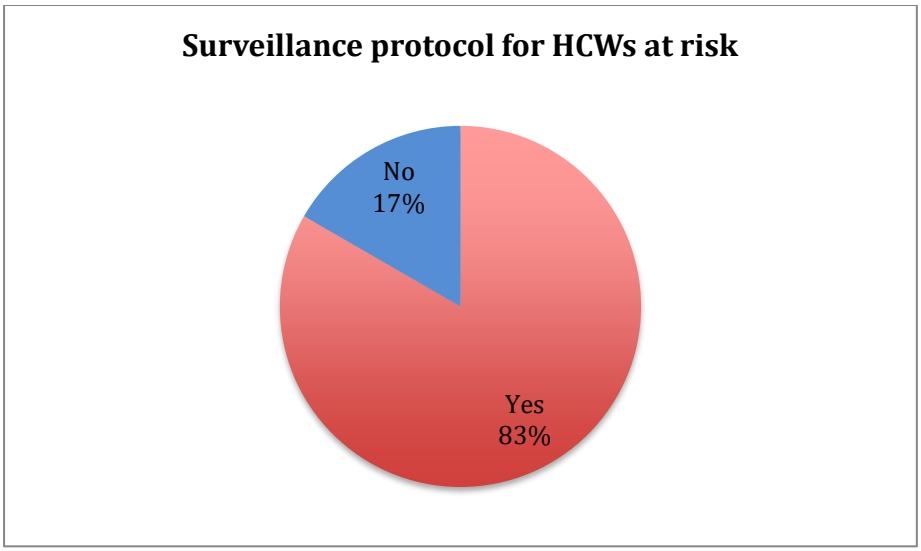
COUNTRY	Participated in Questionnaire	Participated in Interview
BAHAMAS	√	√ ⸸
BARBADOS	√	
BELIZE	√	√*
DOMINICA	√	
GRENADA	√	√*
GUYANA	√	√ ⸸
HAITI	√	√ ⸸
JAMAICA	√	√ ⸸
ST. LUCIA	√	√*
ST. VINCENT AND THE GRENADINES	√	
SURINAME	√	√ ⸸
TRINIDAD AND TOBAGO	√	√ ⸸

*National officials
⸸HSS Advisors

The interviewees described barriers and facilitators that influenced the COVID-19 response. MoH governance was challenging in some countries, especially in those with decentralized regions, the type of leadership and the involvement of the highest level of national authority was also an important factor, with national committees lead by prime ministers or ministers of health. The previous experience in sanitary emergencies, such as the influenza pandemic in Belize or dengue fever in Jamaica, was a facilitating factor in COVID-19 response, in a similar way as the level of disaster preparedness and management, as in the case of The Bahamas and Dorian Hurricane. The political momentum was an influential factor in the response, as observed in some countries.

All the countries referenced shortages of health care workers. Several countries reported that HCWs were testing positive to the coronavirus, in particular those working in the frontline, although some were imported cases (Saint Lucia). Besides nurses and physicians, there is no agreement on what type of health workers should be included in the reports on COVID cases among HCW. Ten out of 12 countries (83%) reported having a protocol for HCWs at risk (Figure 1). Migration of nurses during the pandemic was mentioned by Jamaica and Trinidad and Tobago for reasons identified in a previous study (work conditions and salary). Grenada reported some cases of discrimination against HCWs using public transportation, and for that reason the MoH arranged special transportation for them.

Figure 1. Countries with a surveillance protocol for HCWs at risk of COVID-19 exposure



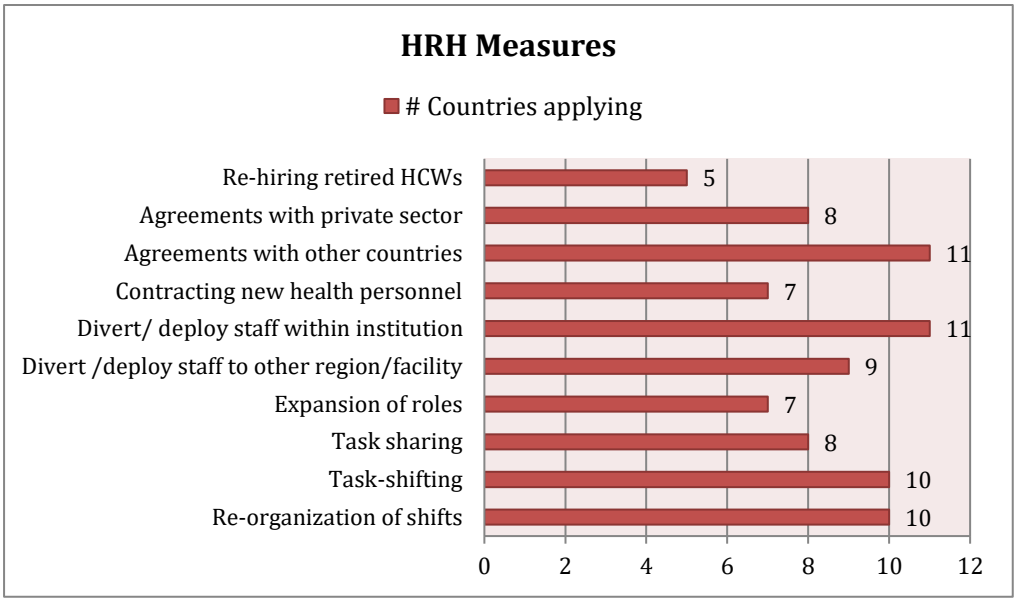
Source: PAHO, Questionnaire COVID-19 response and HRH, July 2020

3.1. HRH and measures taken during the COVID-19 response

Existing Human Resources for Health

Most of the countries reorganized shifts, introduced task shifting, and deployed staff within institutions or between regions (Figure 2). The pandemic could have affected the distribution of human resources for health in the countries: personnel were diverted from PHC clinics to facilities in urban centers, or were assigned to government quarantine facilities, designated COVID-19 hospitals and to the borders to control the appearance of cases among undocumented migrants from neighboring countries. Due to HRH shortages, measures were being taken even before the pandemic. For example, Belize reorganized shifts in health care facilities. In Haiti there were not enough personnel to operate the newly arrived ventilators; the additional PCR machines created the need of more lab technicians in Grenada. Jamaica re-trained community health workers (CHWs) originally hired for the control of dengue fever, so they could participate in activities related to the COVID-19 response. The positive results motivated the country to assign funds for hiring 1,000 additional CHWs. The network of community health workers in Belize provided basic essential services, health promotion and prevention. Haiti assigned new tasks related to COVID-19 response to its community health workers, which included contact tracing and surveillance; this is the largest category of HCW (5,500 in the country). Bahamas had a significant number of professionals doing homecare.

Figure 2. HRH Measures for COVID-19 response taken by countries. Caribbean Subregion, 2020



Source: PAHO, Questionnaire COVID-19 response and HRH, July 2020

There was also a reorganization of resources within the MoH, like in Jamaica, where mobile units for HIV were rebranded for COVID-19 and staff were trained and redeployed at the institutional and national level.

Incoming HRH

Some of the participant countries assigned or identified resources to hire new personnel: Trinidad and Tobago hired 100 physicians and 100 nurses, and Haiti contracted 80 health care workers for a new hospital. Jamaica is planning to hire 1,000 community health workers to support contact tracing, communication and community engagement. Some countries did not have the need to hire additional HCW. Jamaica had few patients needing critical care at the same time (around three) and the MoH was able to work with the existing resources.

By June 2020, there were over 600 Cuban health care professionals working in the Region supporting countries and territories in the response to COVID-19. Of the participating countries, only The Bahamas did not have Cuban brigades. Jamaica had the largest brigade with a total of 140 nurses and physicians, followed by Saint Lucia (113), and Barbados with 101 Cuban HCWs. The Cuban medical brigades were composed of medical doctors and nurses, including general practitioners, intensivists, internists, infectious diseases, epidemiology and other specialties. In several countries, Cuban personnel were already present before the onset of the pandemic.

Most countries deployed nursing and medical students in the last year: Bahamas, Grenada, Jamaica, Suriname and Trinidad and Tobago. In Belize and Saint Lucia this measure did not materialize, but the two countries are ready to deploy students if the number of cases increases. Haiti deployed residents in social service (physicians and nurses). The reported activities of medical and nursing students included support to call

centers, contact tracing, triage, diagnosis, and referral. Several countries referred the use of volunteers, either health care workers from other units, regions, or from the private sector, who were assigned to health care facilities or call centers (Bahamas, Grenada, Jamaica); or lay volunteers recruited by the MoH (Belize) to man community quarantine centers. Guyana, Haiti, Suriname and Trinidad and Tobago did not report the participation of volunteers by the time of the interview. Yet, Guyana has started to train volunteers that will implement contact tracing activities by phone. Health care volunteers worked with COVID patients in health care facilities and PHC clinics, supported call centers and contact tracing; lay volunteers worked in quarantine units and supported logistics (food, supplies and ensure basic preventive measures). The Bahamas was cautious about working with volunteers, after the experience of Dorian Hurricane, when coordination became a challenge.

Coordination with the private sector varied in the Subregion. Most countries established partnerships or agreements with private health care facilities. In few cases, there was no coordination with the MoH and there were reports of private clinics denying access of people with COVID-19. Some countries reported receiving support from the private sector to set up call centers or hotlines (Bahamas, Belize, Grenada, Guyana, Jamaica, Saint Lucia). In Saint Lucia physicians received cell phones so they could use them for tele-triage.

Table 2. HRH Measures by country.

COUNTRY	Re-organization of shifts	Task-shifting	Task sharing	Expansion of roles	Divert /deploy staff to other region/facility	Divert/ deploy staff within institution	Contracting new health personnel	Agreements with private sector	Agreements with other countries	Re-hiring retired HCW
Bahamas	√	X	X	X	√	√	X	√	X	√
Barbados	√	√	√	√	√	√	√	√	√	√
Belize	√	√	√	X	√	√	X	√	√	X
Dominica	√	√	√	√	√	√	√	X	√	√
Grenada	√	√	X	X	X	√	√	√	√	X
Guyana	√	√	√	√	√	√	X	X	√	X
Haiti	√	√	√	√	√	√	√	√	√	X
Jamaica	X	√	X	X	X	√	√	√	√	√
Saint Lucia	√	√	√	√	√	X	X	X	√	X
Saint Vincent & Grenadines	√	√	√	√	√	√	√	√	√	√
Suriname	√	√	√	√	√	√	X	X	√	X
Trinidad & Tobago	-	-	-	-	-	√	√	√	√	X

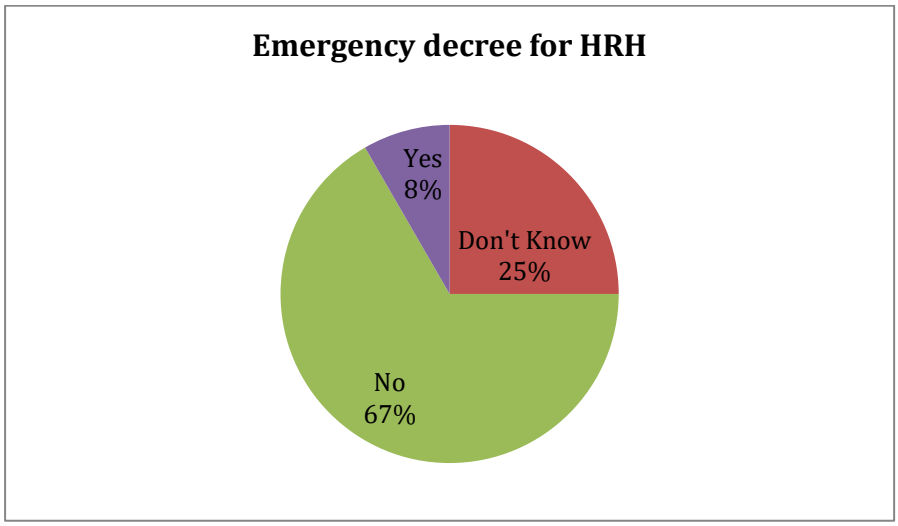
Source: PAHO, Questionnaire and interview COVID-19 response and HRH, July 2020

3.2. Legal framework

Participating countries did not report having specific legal instruments that addressed HRH staffing, scaling, and well-being of health care workers. All countries reported the existence of emergency response decrees; some of them enabled the authority to hire HCWs or other personnel. According to the questionnaire, only one country (8%) had an emergency decree to hire, incorporate or relocate HCWs (Figure 3). Grenada mentioned the Public Health Act 6263 that grants the CMO the authority to hire essential workers, including HCWs, if there is a need and provides for mandatory quarantining of people. In Saint Lucia the National Disaster Management Act allows the reassignment of human resource, and the relocation of financing from various

departments. Trinidad and Tobago referred an existing legal framework that allowed taking measures related to HRH staffing, scaling and mobility. In Haiti the social residency law allowed the deployment of residents (nurses and physicians).

Figure 3. Percentage of countries with emergency decrees to hire, incorporate or relocate HCW. Caribbean Subregion, 2020



Source: PAHO, Questionnaire COVID-19 response and HRH, July 2020

Participating countries did not have occupational safety and health legal instruments for their health care workers. In Belize, the Occupational Safety and Health Act covers all type of workers, including HCW, but it has not been yet ratified. Insurance for the HCW and their families was under consideration in The Bahamas.

Healthcare facilities are taking initiatives on HCW staffing and scaling, testing, protocols for HRH risk assessment and protection, particularly in those countries where hospitals have a high degree of autonomy.

3.3. Health care workers at first level of care and COVID-19

Most participating countries maintained basic essential health services (immunization, maternal and newborn health, sexual and reproductive health, NCDs and communicable diseases). Some countries stopped the operation of PHC clinics temporarily and directed the staff to other facilities. They reopened them using a scheduled modality. In several countries, health care workers were diverted from the first level to other levels of care in different facilities, a measure that contributed to the reduction of the provision of essential services. Countries referred other causes for this reduction: reorganization of services by appointments only, transformation of health services for COVID-19 response, expanded schedule at PHC clinics, multi-monthly medication supply given earlier to NCD patients (three-month), government decrees and national campaigns to stay home, freeze of public transportation, and, fear of the population.

Basic essential services in Belize, such as maternal and child health, sexual and reproductive health, immunization, health promotion and prevention, continued to be provided by public health nurses, rural health nurses and the network of community health workers distributed across each region. Medical and nursing students supported first level of care (FLC) activities, including contact tracing, diagnosis and surveillance.

A country used rapid response teams because "…at the PHC centers, there was no contact tracing or surveillance and staff were insufficiently trained and unmotivated". In The Bahamas, mobile teams composed of a PHC doctor, a nurse and a surveillance person oversaw home monitoring of suspected cases identified by the call center. Trinidad and Tobago reported the expansion of roles in HCW at the primary care level to support COVID-19 response. Community health workers were key to increase contact tracing and surveillance of COVID-19 cases in Jamaica. Saint Lucia was working in establishing district disaster committees with community members to support surveillance activities at the community level.

3.4. Plans for training

Participant countries did not report having national plans of training on COVID-19, except The Bahamas, where the Public Hospital Authority oversees a national plan. However, all countries carried out COVID-19 training of HCWs, most of them in areas related to infection prevention and control (IPC), with an emphasis on the use of PPE, testing, early detection of suspected cases, management of patients and psychosocial support. Training was directed to medical doctors, nurses and in some countries to community health workers. Medical and nursing students received training in areas related to contact tracing, diagnosis and referral, before being deployed to health and quarantine facilities, or call centers.

In most cases, the MoH organized and coordinated the training, with support from international agencies such as PAHO. Training was also planned by regional entities or hospital facilities. In Suriname there was coordination with the university for a possible partnership between PAHO and the nursing school to host the courses. Trinidad and Tobago MoH requested the University of West Indies to develop an introductory course on critical care for nurses. The first cohort started in early July with PAHO support. In Saint Lucia, there was an initial training program embedded in the COVID-19 National Plan.

In Suriname, training was done routinely through ad hoc basis, mainly webinars, in accordance with the needs. Currently, the country is translating WHO courses from English to Dutch with PAHO support. Although not yet completed, the MoH of Haiti and PAHO have trained polyvalent community agents in areas of communication, sensitization, early detection of suspected cases, infection prevention and control, contact tracing and management of patients. To date, 1,648 staff have been trained on early detection and IPC measures (including the appropriate use of PPE) and 305 healthcare personnel have been trained on oxygen therapy. Belize trained volunteers for quarantine facilities and community workers on self-care and management of chronic illness.

Some countries indicated that there were still some gaps in training, especially among first level of care staff. Training focused mainly in frontline HCWs.

4. DISCUSSION

The COVID-19 response in the Caribbean has been influenced by different factors that included the type of health system and the model of care, the level of decentralization, the type of leadership and the involvement of the highest level of national authority, the previous experience in sanitary emergencies, the experience in disaster preparedness and management, and, the political momentum.

The pandemic seemed to have exacerbated the gaps in availability, distribution and quality of HRH, the limited ability for expansion, recruitment and retention. There were HCWs testing positive to the coronavirus, and some level of discrimination and stigma towards health personnel.

Some of the measures taken on HRH staffing and scaling to respond to the coronavirus were similar along the Caribbean: reorganization of shifts, task shifting, and deployment of staff within institutions or between regions. A hospital-centric approach to the COVID-19 response was common in the Subregion. However, primary care staff were key in the response in some of the countries, through the deployment of mobile teams, public health nurses, rural nurses and community health workers that were engaged in contact tracing, surveillance and referral. The effectiveness of this resource was linked to the education and training received before and during the pandemic. These experiences demonstrated that strengthening HRH at the first level of care could increase the capacity of response.

The pandemic led to the recruitment of physicians and nurses, agreements with other countries (Cuba), deployment of residents in social service, deployment of medical and nursing students, and, participation of volunteers (health care professionals and lay volunteers). Some countries did not require hiring additional human resources.

There were no legal instruments that specifically addressed HRH staffing, scaling, and well-being of health care workers. Countries reported emergency decrees that referred to *essential workers*; some of them included measures that apply to HCWs. Protection of health care workers represents a challenge in the Subregion: none of the participating countries had declared COVID-19 an occupational disease (Belize had an occupational health and safety act in process of being ratified); no additional health insurance plan for HCWs and their families was offered (under consideration in The Bahamas).

Decentralized regions and healthcare facilities are taking initiatives on HCWs staffing and scaling, testing, protocols for HRH risk assessment and protection, particularly in those countries where hospitals have a high degree of autonomy.

Most participating countries maintained basic essential health services. However, interviewees referenced reductions caused by: health care workers diverted from the first level of care to other facilities, reorganization of services by appointments only, transformation of health services for COVID-19 response, expanded schedule at PHC clinics, multi-monthly medication supply given earlier to NCD patients (three-month),

government decrees and national campaigns to stay home, freeze of public transportation, and, fear of the population.

Public health nurses, rural health nurses and community health workers supported PHC physicians and nurses in the provision of basic essential services, health promotion and prevention, or continued the provision when doctors and nurses where deployed to other facilities. Medical and nursing students supported FLC activities, including contact tracing, diagnosis and surveillance. Community engagement through district disaster committees was only referred by Saint Lucia as work in progress.

Most participating countries did not mention having national plans for training HCWs in COVID-19 response. However, they prioritized training in IPC, testing, early detection, management of patients and psychosocial support for their staff. Some countries trained community health workers, medical and nursing students, and volunteers. In most cases, MoH coordinated HRH training, supported by agencies such as PAHO, which was referred to as an important partner. Hospital facilities, academic institutions and professional colleagues were also involved in COVID-19 training, sometimes in coordination with the national health authority.

The Caribbean has accumulated experiences and lessons learned related to HRH and the response to the COVID-19 pandemic. It is necessary to identify and systematize these and other experiences to share them among the countries of the region, to learn from them and to allow the development of common standards and guidelines for HRH planning and policy development in the Caribbean. Considering the impact of the pandemic on the health workforce and the health systems, the establishment of an HRH Action Task Force could support efforts to advise and monitor the development of public policy in the countries and territories of the Caribbean.

APPENDIXES

APPENDIX 1: COUNTRY INTERVIEWS

COUNTRY	*General overview*	*Measures taken related to HRH during COVID-19 response*	*Legal framework*	*Plans for training*	*FLC health care workers and COVID-19*
BAHAMAS	***Date of interview:*** 21 May 2020 -Bahamas has a Public Hospital Authority (PHA), a public entity with a high degree of autonomy that manages the 3 hospitals in the country, including HRH (most financial resources are allocated to PHA). -MoH, with the exception of the PHC Clinics in Grand Bahama, manages PHC Clinics. They have different protocols, and salaries. There is no HRH Unit in the country. -The country was better prepared after Dorian Hurricane, when Bahamas worked on emergency protocols, logistics, better coordination of human resources, although there are still some gaps. -Currently the Bahamas has an acting Minister of Health and Acting Permanent Secretary (PS). -PAHO proposed a case-control study in Bahamas in the two facilities: 1 public hospital and 1 private hospital, to characterize and assess the risk factors for SARS-CoV-2 infection in health personnel with exposure to COVID-19 patients with the support of PHE PAHO HQ. -The Bahamas strengthened the application of protocols, IPC measures, social distancing, contact tracing and the use of PPEs. (One new case in May 30). A study of the 20 first cases identified some	The percentage of HCW who tested positive to COVID-19 is: 23% of total cases (the majority of them at the beginning of the pandemic). *EXISTING HRH:* -Re-organization of shifts -Diverting staff from other services within the same institution -Deploying staff to different health services or areas of the country where they are most needed. -Homecare HCW: There is a significant number of professionals doing homecare. Some of them are not certified. *IN-COMING HRH:* -Some retirees were hired for the virtual call center. -Medical students participated in activities of call center and contact tracing by phone. -There were also some volunteers. There was a bad experience with volunteers during Dorian Hurricane, so they were cautious about working with volunteers again. -One of the successes has been the coordination between public and private sector (not seen before). Private sector made available ambulatory health facility to be used exclusively for clinical management of COVID-19 (Drs. Hospital West), including its health care staff (in the in-patient ward). -No Cubans HCW in Bahamas. The country believes that they can manage it with local HRH.	-Bahamas declared an Emergency decree. It does not mention HCW in particular. -MoH can mobilize HRH and additional resources to face an emergency. They had been proactive and diligent. -Emergency National Plan for Dorian Hurricane. -COVID-19 is not considered an occupational disease. The Bahamas is considering an insurance for the HCW and his/her family in case of death of HCW.	-There is a national plan. PHA oversees the HCWs training. They have a Capacity Development unit and carry out the training to HRH. Capacity building was strengthened due to the pandemic and HCW were trained and re-trained. There is a group who still was not trained.	-Essential services were maintained. HRH were distributed according to the needs, since there were places with almost no cases. Essential services functioned almost as normal, but the demand was reduced significantly. Fear of people was one of the reasons for this reduction. In Nassau, which has the largest population, services were maintained, but with low demand. One of the clinics was transformed to work 100% in COVID-19. -PHC clinics expanded their schedule to reduce demand of the public hospital. -Surveillance of the area most strengthened. Quarantine facilities were opened, as well as a virtual call center. Mobile teams composed of a PHC doctor, a nurse and a surveillance person, did the home monitoring of suspected cases identified by the call center.

	gaps (there is a document that will be provided by Bahamas).				
BELIZE	***Date of interview:*** *21 May 2020* -Currently there are zero active cases in Belize (since 15 April). Expecting a second wave. -Belize is divided in 4 health regions: Northern, Western, Central and Southern. -Therefore, there are decentralized plans for COVID-19 response and centralized procurement of equipment and supplies. A National COVID-19 Response Plan serves as a guideline for all health regions. -There is only 1 National Referral Hospital (KHMH) and also secondary care for the Central Health Region (in Belize City). -The country is experiencing financial constraints. -There are border crossings from Guatemala and Mexico (land) and Honduras (maritime border). There is the possibility that a new case will be confirmed from border crossing. The country is monitoring COVID-19 trends in neighboring countries.	-There are no HCWs affected. - In early March, Belize applied the PAHO health service needs capacity tool, which was very useful to estimate HRH and beds needs. *EXISTING HRH*: -Reorganization of shifts from 8h to 12 hrs shifts (situation existed before COVID, due to HRH shortage). -Task sharing (use of interprofessional teams, task shifting (HCWs doing work on mental health, flu clinics, isolation centers, etc.) -Diverted staff within departments and units: nurses and doctors deployed from other wards to the flu and isolation centers; not able to rotate to other areas due to potential exposure to COVID-19 suspects. There was no need to divert HCW from other regions, except to the Central Medical Laboratory where testing occurs. At the Central Medical laboratory (CML) which centrally conducts COVID-19 testing, lab technicians from other health regions were mobilized to support CML; they were provided housing. This was not done for nurses, although it was part of the response plan. *INCOMING HRH*: -In collaboration with National Emergency Management Organization (NEMO), MoH recruited lay volunteers to man community quarantine centers (to coordinate logistics: food, supplies; ensure basic preventative measures, etc.). If the need arises, the MOH, through the Ministry of Public Service and the Ministry of Finance, will contract new health personnel through a prioritization process. -If the number of cases increases, nursing students soon to graduate will be called. The deployment of nursing students soon to graduate from the University of Belize was	-State of emergency declared at the start of the pandemic. It states that HCW are considered essential workers. -National Interim COVID Response Plan. -Exception exists for health workers mobilization and scaling despite the general freeze on hiring government personnel due to financial constraints. -Occupational Safety and health (OSH) Act up for ratification. It covers all type of workers, including HCW. -Health facilities are taking initiatives on HCW protection, including testing for the returned (documents produced at the facilities). -Verbal pronouncement from the PM on housing and nannies for frontline HCWs -There is an Agreement between the MoH and University of Belize in case there is the need to call on final year nursing students. -There is no legal instrument that addresses HRH staffing and scaling, and well-being of HCW.	-Currently, no national plan of training on COVID-19. -PAHO supported the training on the estimation of PPEs, medicines and supplies for COVID -Training in IPC, PPE, case management, critical care (initiatives from health facilities, medical associations)- KHMH conducts virtual training for HCWs countrywide. -Training for estimation of PPEs, medicines, and supplies -Training of volunteers for quarantine facilities (handling of food, preventative measures) -Training of Community Health Workers on self-care and management of chronic illnesses, maternal and child health care, sexual and reproductive health and other essential services -Training on laboratory testing for COVID-19 using the GeneXpert platform in regional laboratories; and on maintenance and trouble-shooting of hospital-grade autoclaves for waste sterilization at the National Engineering and Maintenance Center of the MOH when the above equipment are procured by PAHO/WHO through reprogrammed EU Health Sector Support Project (PAGoDA) Funds	-PHC remains at the core. Basic essential services such as MCH, SRH, immunization, health promotion and prevention are still provided by Public Health Nurses (PHNs), Rural Health Nurses (RHNs) and network of Community health workers (CHWs) distributed across each region. -Reorganization of services: Elective surgical services were deferred -Decrease in number of consultations noted since NCD patients were given multi-monthly medications (3 months), pregnant women got their vitamins from RHNs and CHWs, and those at risk were advised to stay away from the health facilities -Use of Telemedicine through the MOH COVID-19 hotline (0800-MOH-CARE) and 24/7 mobile cell numbers available at all regions.

		also part of the National Response Plan. Volunteers and retired nurses could be also called if the need comes. -Volunteers could be used for quarantine facilities (recruitment and capacity building already done): preventive measures, basic care, stay in facilities. -There is an agreement with Belize Healthcare Partners (private sector) to provide support in terms of health services, referral mechanisms, amongst other things. *Cuban brigade*: The frontline of the Ministry of Health was strengthened by the arrival of a Cuban Medical Brigade comprising of 62 medical professionals (doctors and nurses). They were quarantined for 14 days and distributed to the 4 regions. -Previously there was already a HCW shortage in the country.			
GRENADA	***Date of interview:*** *17 June 2020* -The Influenza Pandemic Plan was the basis for the COVID-19 response. The country worked on building capacity at the ports of entry: airport and port. -They received technical support from PAHO and CARPHA for testing, training, and producing technical guidelines. Grenada began PCR testing in mid-March. -The focus has been on contact tracing, testing and the ability to treat. The country is in good position to start opening their borders. -There were no shortages of HCW in the first stage. There may be challenges in the future, if there is the need to do large numbers of contact tracing. There could be shortages if Grenada doesn't put a system in place to have more volunteers from the community. -HCW affected by the virus: 0 cases at the moment	*EXISTING HRH*: -Reorganization of shifts at the hospital level: 12hr. -Diverting HCWs from other services within the institution: Volunteers were assigned to work with COVID patients. Physicians currently employed at the hospital level were re-directed from regular staffing to volunteer in the COVID19 teams. They had separate accommodations. -At the community level, public health nurses were doing rapid testing for screening and nasal swabs for diagnosis. The rest of the HCWs kept doing their own tasks according to their capacity. -They are ready to move staff from other parts of the island if the need appears. *INCOMING HRH*: -PAHO assisted Grenada on the surveillance side through hiring a surveillance official. -St. George´s University provided support to the community level in contact tracing through nursing students. St. George also supported with PCR testing. *Cuban brigade*: Cuban HCW to assist with the tertiary care: ICU, infectious	-Declared a State of Emergency on 25th March 2020. The Public Health Act 6263 was put into action (it provided for mandatory quarantining people). It gives the CMO the authority to hire HCW if there is a need.	-There is no structured national training program, but the necessary training has happened through collaboration of PAHO.	-PHC providers remained at the primary level. Essential services were maintained. There was a significant decrease in the number of attendances by the public. The reasons included: national education to stay home, freeze of public transportation (difficult to reach the facilities), fear of the public. -There was some discrimination against HCW, and for that reason special transportation had to be arranged for them. -Nursing students from St. George University: contact tracing. -Community nurses: taking samples.

		diseases and nursing care. 6 Cuban nurses plus 2 Cuban doctors (internal medicine specialist and an intensivist).			
GUYANA	***Date of interview:*** 26 May 2020 -Guyana has 10 decentralized regions, each one with autonomy to organize health service provision in their areas. -General elections were held on March 2, 2020. Voting count in process, since the results were contested (On August 2, elections results were announced, and a new government sworn in). -COVID-19 response is organized in a network of 12 hospitals that isolate cases and arrange the initial case management of patients. If a patient deteriorates it is referred to the only national referral hospital located in the capital of the country. -Georgetown Public Hospital Corporation (GPHC) is the only health facility with specialties; receives the transfers of moderate to severe cases. This hospital concentrates most of the specialized health care throughout the country. -40 patients in ICU (out of 137 cases): moderate and severe. -The policy environment signaled: -Low preparation to respond to the epidemic -Lack of clarity on which level of care do what and when for the response -Problems in the communication betwee n MoPH and Ministry of Regions (which funds the FLC in regions in Guyana and the 12 hospitals) -Problems of coordination at MoPH.	-Affected HCW: information not available at the time of the study. -The country created Covid-19 phone lines that are currently operating in the 10 administrative regions. -The information on measures taken during COVID-19 corresponded to Region 4 (Georgetown), Regions 3 and 5, where most of the cases were located. *EXISTING HRH* -There was a shortage of health care workers before the pandemic started. Last year, the country adopted steps to increase the health workforce. GPHC Hospital established the following measures: +Reorganization of shifts +Task shifting, task sharing and expansion of roles. +Team approach: 1 intensivist supervises 3-4 general practitioners and 15 nurses per 5 ICU beds. -There are reports from MoPH that HCW from PHC centers were relocated to hospitals due to increase in demand for services in at hospital level. -It is not clear if the pandemic worsened the distribution of human resources for health in the country. From a total of 1,100 nurses in the country, 850 are working in Georgetown GPHC. There are 600 medical doctors, and around 500 work in the capital. -With 80% of nurses and doctors working at hospital level (at GPHC), the MoPH has mostly relied on the GPHC for treatment of moderate to severe cases (currently all ICU units for COVID-19 in the country are located at this hospital. -In Region 4, 29 PHC medical doctors were transferred to hospitals due to the increase in demand for hospital care (mostly at GPHC). *IN-COMING HRH* -Coordination with private sector is limited. When a case comes to a private	-The State declared a national curfew on April 3, 2020. The decree does not explicitly mention measures on HRH staffing or scaling. On June 3 the gradual reopening of the country started with a process of 6 phases of 2 weeks each.	-A national plan of training is being prepared. There has been several trainings based on needs (see below): -IPC at all regional Covid-19 facilities to be replicated at first level of care (FLC). To date replication at FLC is being completed. Around 70% of facilities have been trained. -Training on PPEs use -Adoption of Guidelines, case definition and SOPs for screening and referral of suspected cases to Covid-19 designated hospitals. -Training on surveillance GoData is being provided to surveillance teams that will be based in the designated Hospitals. -IPC checklist and readiness checklist are being adapted to the FLC and will be implemented in the current month in 4 regions. -Mental health (psychosocial support and self-care) training at FLC (and all levels) is being prepared. Currently preparing training materials and training of trainers to start by mid-May. -Government restricted travelling of public officials to the Regions to avoid transmission. It included trainers. - PAHO trained personnel in IPC before the pandemic (2018-2019). Afterwards, travel restrictions made difficult to continue. - Training of PHC personnel is a challenge at the moment.	Covid-19 activities (care, surveillance, specimen collection, contact tracing) are undertaken by the 12 hospitals mentioned. -Rapid Response Teams are been deployed in key affected regions to support screening, lab samples, isolation, referral and contact tracing. -There are 232 health posts and health centers operating at the primary level in the 10 administrative regions of Guyana. The first level of care (FLC) has the following functions: -Screening and referral of suspected COVID-19 cases -Refer suspect patients to the hospitals -Health promotion and risk communication, -Provision of mental health support in May 2020 -Some regions reported a reduction in the delivery of health care services (consultations) in PHC centers. The reasons were social distancing measures, the reduction of walk-in clinics, the low demand from the population, and in some cases the redeployment of HCW to hospitals. Additionally, people were experiencing fear of being infected. -Another critical aspect that may be impacting operations at the FLC is provision of PPE. There are reports that most support on PPEs is focused in the hospitals that provide Covid-19 care and the Georgetown Public Hospital Corporation (GPHC). Some human resources at FLC, report low supplies and less commitment from Regional Health Services to be provided adequate quantities and types of PPEs. -At the time of the interview there were reports that Maternal and child clinics had reduced their services for the

		clinic, most cases are transferred to the GPHC. -No medical students or retirees were deployed. *Cuban Brigade*: A Cuban medical mission works in the country (before the pandemic) approximately 22. Guyana does not require a visa for Cuban citizens. There are Cuban HCWs who moved to Guyana to work as health care professionals. No additional Cuban health care workers have come to Guyana after the start of the epidemic.			reason mentioned above. Yet, in recent weeks regional health officers mentioned that services are being normalized. A system of appointments was adopted, which may have affected access. Vaccination remains at similar levels, although with logistical difficulties: due to air travel and cargo restrictions, increased costs of shipping. No interruption of routine immunization campaigns was recorded in April. -*PHC Centers*: Personnel are composed of nurses and midwives. The staff refers possible cases to hospital. No surveillance or contact tracing at FLC.
HAITI	***Date of interview:*** 28 May 2020 -Haiti has a population of over 11 million people. -Haiti's health care system overall is extremely reliant on private sectors, including foreign assistance and NGOs, thus coordination is fundamental. There are 5 facilities designated for COVID-19. The biggest concern is that there are several departments with no referral facilities. Quarantine facilities. -Haiti has an estimated 124 ICU beds and 64 ventilators for a population of more than 11 million.	-In Haiti there are 3,854 doctors and approximately 10,000 nurses. -194 HCW affected as at June 17, 2020 -Shortage of HCW was already a major problem before the pandemic. -At early stages of the pandemic the number of PPEs were limited. Health care professionals were afraid of getting the virus and left the facilities, some of them never to come back. -Stigma: HCW not socially accepted *EXISTING HRH:* -Some staff was diverted from other regions from the country (no more details). -In some areas there are no personnel to manage ventilators. -Other measures included reorientation of shifts, task shifting and sharing, and expansion of roles (no more details provided). *INCOMING HRH:* -Lately, the MoH recruited 80 health care workers to staff a new facility (Canan). -Residents in social service (doctors and nurses) were about to be deployed around the country to work in health facilities. They will receive training before they are deployed to the front lines. Their functions include: Triage, diagnosis, and referral. Western department has 329 HCW: 293 doctors, 9 nurses (midwives), 6 lab technicians and 12 dentists.	-A Presidential order issued on 19 March 2020 declared the state of health emergency in the country. National Preparedness and Response Plan to address COVID-19. Another emergency decree was issued on 11 May 2020. No mention to health care workers. -The May decree allowed HRH and essential workers mobility during curfew. -Law of Social Residency: (old law from 1940) that allows deployment of residents.	-Haiti does not have a national plan of training on COVID-19. MoH and PAHO have trained polyvalent community agents all over the country in areas of communication, sensitization. Haiti also carried out training of trainers. National COVID Committee approved the subjects, although it has not been completely formalized. PAHO/WHO has conducted training sessions on early detection of suspected cases, infection prevention and control, and management of patients.	-Health care personnel from the PHC have left. The ones who remain are providing essential services and doing what they were doing before, although with a reduction in number of consultations. -Provision of essential services: continues with the same limitations than before. A minority of Haitians have access to a primary health care facility of good quality. Only 23 percent of Haitians live within 5 km of a dispensary or health center that meets adequate service readiness standards.

		-There are 5,500 community health workers: new tasks related to COVID-19 such as contact tracing, surveillance. This is the largest category of HCW. *Cuban brigade*: 20 HCW: 12 doctors, 6 nurses, 1 lab tech and 1 biomedical technician.			
JAMAICA	***Date of interview:*** 22 May 2020 -Jamaica increased the number of critical care and high dependency unit beds from 10 to 39. -MOHW established a program for repatriation of Jamaicans living abroad or working in cruises. -In Jamaica approximately 400,000 people were employed by call centers, a leading source of employment. -The MoHW in cooperation with the Ministry of Economy took measures to contain the spread of COVID-19 in call centers: inspections, contact tracing.	-Before COVID-19, Jamaica was already experiencing a HRH shortage, including critical care nurses. Migration of nurses to UK, US, Canada continues to be a problem. *EXISTING HRH* -There was some deployment of staff from other services within the same institution (hospital level) to other more affected areas. -Reorganization of resources from MoHW: HRH from mobile units for Covid 19 were trained and redeployed at the institutional and national level. *IN-COMING HRH* -MoH is planning to hire 1000 community health workers (CHW) to support contact tracing, communication and community engagement. The country had the experience of Dengue search and destroy strategy. CHW followed the same structure but now for COVID-19. By hiring 1000 CHW, the MoH is recognizing the importance of strengthening the first level of care and public health capacity. *Pool of volunteers*: It included last year medical students and retirees. They were mainly placed to work in COVID-19 call centers. Approximately 100 Med students were placed in call centers in 24h shifts, 7 days a week. *Cuban Brigade*. - 140 HCWs: 90 specialist nurses (critical care, emergency, medical, surgical and primary care), 46 doctors (internists, hematologists), 4 therapists. The Cuban brigade arrived on March 21 and stayed in quarantine for 14 days. Afterwards, they were distributed around the country.	-State of emergency declared (Gazette), now in its 6th version. No specific mentioning of HRH staffing and scaling measures. -Guidelines from MoHW for people to follow (i.e. physical distancing, etc.) -Plan of reopening the economy (in progress). It includes a Health Sector Plan with the steps to increase capacity.	-MoHW and PAHO have carried out training in IPC (mainly), psychosocial support, clinical case management.	-Contact tracing and community engagement is carried out at the first level of care. MoH wants to strengthen this capacity through community health workers (CHW). Dengue pushed the use of CHWs and they have been working for a year in the search and destroy strategy. At the onset of the COVID-19 pandemic, CHW were trained in IPC, contact tracing and were given information to distribute to the population. They were re-directed from Dengue to work in COVID-19. -MoH recognized the importance of CHW and will hire 1000 additional community health workers. -COVID-19 Call centers: They function with last year medical students and some retirees distributed in 24h shifts 7 days a week. They use algorithms to identify suspected cases. At the beginning, call centers were seen with distrust from the people, but now they are utilized by the population. -The pandemic pushed to a reorganization of services at the PHC level (mobile HIV units case). Provision of essential services: MoH suspects that some essential services (including vaccinations) were reduced. -Some of the reasons for this reduction include deployment of HCW and fear of the population to access PHC clinics. Moreover, the decrease of consultations could also be related to the 3 months' supply of medication given to people with NCDs and HIV, before the onset of the pandemic.

ST. LUCIA	***Date of Interview:*** 1 July 2020. -Primary health care-based system, with 34-community wellness centers, including 2 district hospitals. St Lucia has 2 general hospitals: 1 in the North (new hospital) and 1 in the South. Victoria Hospital was a general hospital and became a Respiratory Center in the context of COVID19. It has a respiratory clinic. At the community level: 5 respiratory clinics across the island at the community wellness centers. - There is one private hospital that has been part other structures of management of COVID19 cases -There are public health facilities around the country (5 major hotels) for persons who may have been exposed, returnees. The facilities have nursing stations with RNs 24h and doctors on call. A referral system as works between PH facilities and hospitals. PH Facilities were used initially for isolation and quarantine. Currently they are only for quarantine. There is also home quarantine. -30 days with no cases. None needed ventilations. No case needed major interventions or ventilators. 1700 tests and continue sampling potential cases. -Port health surveillance: surveillance team -There were shortages of HCW - Jan 2020: MoH put together a Covid19 Preparedness and Response Committee to put a plan to manage COVID-19: HRH, infrastructure, medical supplies and equipment. -COVID-19 Treatment Team: staff from general hospital, but also from PHC services. Using guidelines	-HCW affected by the virus: 6 persons infected and hospitalized, 3 of them were imported. The other 3 in country, 2 active working at the frontline *Existing HRH* -There was temporary reassignment of PHC personnel to the secondary level and diversion of staff within the same institutions. -Re-orientation of shifts. *Incoming HRH* -Hiring new staff: Increasing human resource capacity at the port (nurses, environmental health officers) to increase surveillance capacity at ports of entry. -They considered to have MD, RN students, but it did not materialize. -Saint Lucia called for volunteers to work in the COVID-19 Hotline (311). They were trained on general information so they could assist the public. -They received support from the private sector, specifically communication companies that provided mobile phones to physicians who volunteered for tele-triage. -Private physicians joined the team to work in the public health facilities. *-Cuba-Saint Lucia Bilateral Agreement*: 113 Cuban doctors and nurses, biomedical engineers and epidemiologists: 100 nurses, 6 GPs, 3 internists, 2 biomedical engineers, 1 epidemiologist.	-Declared a State of Emergency: activation of protocols, including the National Emergency Management Advisory Committee (Prime Minister chairs this Committee), the National Disaster Management Act that allows reassigning human resource, relocate financing from various departments, and support from external agencies. -Covid19 Command Centre: MoH. Tourism and other agencies. They review and update the Plan.	-There was no national training program. There was an initial training program embedded in the COVID-19 National Plan. The country used materials from WHO, PAHO, CARPHA, CDC as guidelines, preparing training material. Saint Lucia identified frontline HCW, including nurses, medical doctors and even handymen, for the training. -Training sessions and continuing medical education for front line workers. They were linked to the COVID19 Plan. Sensitization for non-health care workers. Training of port health surveillance team. -Areas of training: IPC, PPEs (including using the right PPE)	-PHC centers were not left without staff. Some staff was selected to support the general hospital (there was the need to man the new hospital). The country selected strategic located wellness centers to provide coverage to the communities. -Some small clinics were temporarily closed and directed the staff to other facilities. -Initially there was a reduction in the coverage of essential services: general clinics. They limited the number of people attending clinics to reduce risk (population at risk, elderly). -Contact tracing, referral done by the Epidemiology Unit at the MoH: national epidemiologists, surveillance officers. If the need arises, they would train other personnel from other departments (physicians, nurses, environmental health officers) to support surveillance. -Saint Lucia is working in establishing District disaster committees with community members who will be trained to support surveillance activities at the community level (work in progress).

SURINAME	***Date of interview:*** 20 May 2020 -There is one hospital designated for the management of the COVID-19 patients (a new one). All cases are sent to that hospital, mild or severe. 860 people quarantined in government facilities. There is no home quarantine in the country. -Surinam was preparing for elections on 25th May. -After election, by June 2nd: 27 cases and 1 death (13 cases in June 2). -Only one non-HRH case remains at the hospital (the new case). This case reactivated the monitoring of HCW -The CMO is the authority in charge of COVID response. She has pooled HCW from entities and units and brought together as a management team. The HRH focal point has not been involved in the COVID-19 response.	-HCW none affected. -Only one frontline HRH had symptoms but tested negative. -Monitoring of HCW started at the hospital.HCW were not routinely tested. -No national surveillance protocol for HCW at risk. *EXISTING HRH:* -Reorganization of shifts at the facility level -Task shifting (in detriment of PHC facilities, since HCW were moved from first level of care to COVID-19 facilities) -Task sharing (also cross learning), team approach, reassignment (in detriment of other areas), -Expansion of roles (also in detriment of other areas, IPC network of nurses in hospitals who were moved to quarantine units). -Deployment of staff within the same institution (the number of surgeries was reduced and freed HRH to the emergency unit and outpatient clinics. Staff was also deployed from other areas and facilities. -HCW repositioned to borders (a case was an undocumented immigrant from Brazil who crossed one of the borders). *INCOMING HRH:* -No new contracts of health personnel have been authorized. -Suriname deployed last-year medical students to do surveillance and data entry. *Cuban brigade*: 50 health workers from Cuba were brought to Suriname to work at the designated hospital facility for the management of COVID-19 patients. All of them were deployed at the hospital (where there is only one patient now). To 'onboard' the Cuban health workers, they were taken to the Academic Hospital to do rounds with the Surinamese doctors to understand the local context, set-up of the health system and also the clinical guidelines used in the country. Cuban HCW	-The COVID-19 Emergency Response Decree was issued by the end of April. There are no specific clauses or pronouncements regarding HRH. It allows additional financial resources for hospitals to "support HCW" in response to COVID 19. -Most decision-making regarding HRH mobility, staffing and scaling is at the level of the hospitals (they have a high degree of autonomy). - They interact with MoH for funding.	-National plan for training not yet developed, but training done routinely in accordance with needs. The focus of training has been on IPC and Clinical Management. Training is carried out at ad hoc basis, mainly webinars. PAHO supports them. -Currently, in process the translation from English to Dutch of WHO courses (donning and duffing of PPE course). Others will follow: IPC, clinical management. -PAHO is pursuing a partnership with the Nursing School to host the courses to add sustainability and materials availability.	-PHC clinics initially stopped, and later they moved to a scheduled approach. -There was a decrease in the provision of essential services (vaccination, antenatal care). -Nurses were pooled from PHC clinics to quarantine facilities (17 in total). Some HCW were assigned to hospitals, but not as many as those deployed to quarantine facilities.

		deployed to Suriname: 10 ICU nurses, 20 general nurses, 1 infectious disease specialist, 1 ICU doctor, 18 doctors.			
TRINIDAD AND TOBAGO	***Date of interview:*** 13 May 2020 -TTO created a "parallel system for COVID-19 response". There are 12 facilities assigned to COVID-19. -The response is led by the Prime Minister with an Interministerial approach. The principal ministries include health and security.	*Existing HRH:* -Deployment of staff within the same institution was reported as well as ICU staff deployed to Parallel System where there are ICU needs. *In-coming HRH:* -Hiring of 100 medical doctors and 100 nurses, 16 HCW from Cuba. -Funding provided by a UN Agency. -TTO called medical students in their final year to support in COVID-19 response. No details on numbers or where they are. They are not left alone to make decisions and have a supervisor to support them. -*Cuban brigade*: 16 HCW from Cuba	-Existing legal framework. TTO has plenty of laws and regulations. Public Health (2019 Novel Corona (2019-nCoV) (NO.7) Regulations 2020 came into effect 2 April 2020.	-Individual capacity building at the different levels of the 5 Regional Health Authorities, where health services are provided. UWI develop a course "Introduction to Critical Care Nursing for 25 RN at MoH request. PAHO will be supporting it at the national and sub regional level.	Clinical management done by doctors and nurses at the level of the Parallel System. However, at the primary Health Care level the following is still provided: the pre-triage, triage and evaluation to determine the need of referral of individuals with respiratory illness. They also have to follow-up with family for contact tracing and monitoring, as well as follow-up those who are under quarantine. -Therefore, there has been an expansion of roles of HCW at the primary care level. - Challenges for the continuation of essential health services. The Mental Health and Psychosocial response was telemedicine which has been positive response and responding to the needs of the clients.

APPENDIX 2: QUESTIONNAIRE

COVID 19 RESPONSE AND HUMAN RESOURCES FOR HEALTH

While dealing with the COVID-19 pandemic, it is important to document the ways in which countries of the Caribbean are mobilizing and utilizing their health care workforce to respond to the pandemic.

This questionnaire survey on human resources for health (HRH) and COVID-19 is being conducted by PAHO Caribbean Subregional Program with the objective of identifying HRH interventions and policy development related to COVID-19.

QUESTIONNAIRE

1. Country: _____

2. Number and/or percentage of health workers infected by COVID-19 in your country: _____

Please mark with a circle all that apply:

3. Measures on HRH staffing and scaling that the country is taking to respond to COVID 19: *Existing HRH* (mark all that apply):
   a) Re-organization of shifts
   b) Task-shifting (re-distribution of tasks among health workforce teams)
   c) Task sharing (team approach)
   d) Expansion of roles
   e) Diverting/deploying staff from other services within the same institution to other more affected areas
   f) Diverting/deploying staff to different health services, districts or areas of the country where they are most needed
   g) Other (specify):_____

4. Measures on HRH staffing and scaling that the country is taking to respond to COVID 19: *In-coming HRH* (mark all that apply):
   a) Contracting new health personnel
   b) Considering re-hiring retired health workers for specific tasks
   c) Agreements with the private sector (i.e. telemedicine, volunteers)
   d) Agreements with other countries (i.e. Cuba): _____

5. Please answer YES or NO to the following questions
   a) The country has an emergency decree to hire / incorporate / relocate health workers YES ____ NO ____ Don't know ____

   b) The current legal framework allows to HRH mobilization and scaling to respond to the COVID 19 pandemic? YES ___ NO ___ Don't know __

c) If the answer to (b) was negative, can the legal framework be adapted?
YES ____ NO ___ Don't now ____

d) Does the country have administrative procedures and contractual mechanisms to facilitate HRH hiring, mobilization and/or changes in the worker profile (task shifting, task sharing, role expansion)?
YES ____ NO ___ Don't now ____

e) Does the country have a surveillance protocol for healthcare workers at risk of exposure? YES ____ NO ___ Don't now ____

f) Does the country have a national plan for training health care workers for the COVID 19 response? YES ____ NO ___ Don't now ____