Promoting COVID-19 Vaccine Uptake and Addressing Vaccine Hesitancy in Barbados and the Eastern Caribbean

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I. INTRODUCTION

Since the first confirmed case of COVID-19 in the Caribbean on the 1st March 2020[1], and in the absence of a vaccine, the region swiftly reacted with non-pharmaceutical interventions (NPI) to control the outbreak. Such measures served to limit both movements into countries (through border controls) leading to their partial or full closure, as well as movement within countries that restricted mobility through curfews and lockdown measures.

Economic support packages as well as the sharp declines in growth have led to a dramatic rise in public debt, with the ratio to GDP of ECCU countries increasing by 21 percentage points between 2019 and 2020. For some countries like Dominica and Barbados debt to GDP, levels have exceeded 100% of their national income.[2]

As the COVID-19 pandemic continues to spread around the world, and with the appearance of Variants of Concern (VOC) the number of cases and deaths are increasing significantly. While rigorous testing, contact tracing, quarantine, isolation, and implementing public health measures help to control the spread; having a vaccine was envisioned as a key intervention to significantly reduce the threat.

With the steady arrival of vaccines in the Caribbean over 2021, countries are in a better position now to plan their recoveries from this health as well as economic crisis. As immunity from COVID-19 builds within countries, governments are able to soften restrictions that allow their economies to revive and prosper again.

However, after initial strong uptake, the countries have been experiencing delays in acceptance or refusal of vaccines despite the availability of vaccine services. This hesitancy to be vaccinated has impacted countries forecasting capacity of vaccine delivery to the point that countries are now experiencing vaccine wastage.

Despite the availability of a wide variety of vaccines (see **Chart 1**) in the region, vaccination rates for some Caribbean countries remain low, notably in Grenada, St. Lucia and Saint Vincent and the Grenadines where those fully vaccinated account for at most one in five of the population (see **Table 1**).

[1] In Dominican Republic.

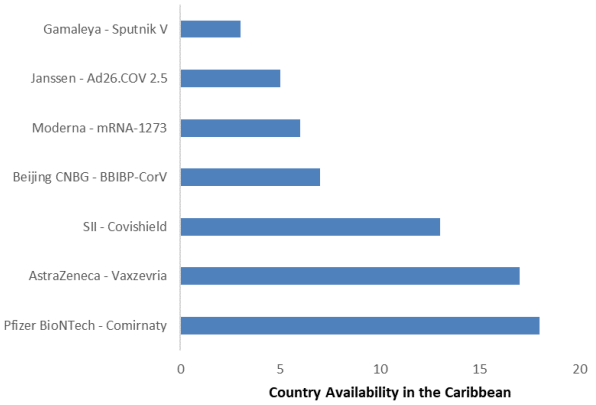
[2] A rule of thumb is that Government Debt to GDP above 85% can be a drag on a country's future growth (See https://www.bis.org/publ/othp16.pdf)

Table 1: Number of People Vaccinated and Fully Vaccinated in the Eastern Caribbean

*Data as of 5th Oct. 2021	People Vaccinated* (% of Population in brackets)	People Fully Vaccinated (% of Population in brackets)
Anguilla	9,548 (63.1)	9,156 (60.5)
Antigua & Barbuda	53,171 (53.9)	42,989 (43.5)
Barbados	136,034 (47.3)	105,881 (36.8)
British Virgin Islands	17,570 (57.8)	15,360 (50.5)
Dominica	25,127 (34.8)	21,567 (29.9)
Grenada	34,535 (30.6)	24,450 (21.6)
Montserrat	1,483 (29.8)	1,388 (27.9)
Saint Kitts & Nevis	25,637 (47.9)	22,422 (41.9)
Saint Lucia	46,732 (25.3)	33,591 (18.2)
Saint Vincent & the Grenadines	20,661 (18.6)	13,488 (12.1)

Source: Our world in data

Chart 1: Country coverage of COVID-19 vaccines in the Caribbean



Source: PAHO

Notwithstanding the substantial benefits of being fully vaccinated, many in the Eastern Caribbean still choose to delay or even not get vaccinated and risk catching the virus.

From an individual's perspective not being fully vaccinated presents potentially fatal consequences both for the individual and those who the individual encounters.

From a socio-economic perspective, the more protracted and pervasive is this pandemic the greater risk of new mutations of the virus arising, which reduce the efficacy of countries' vaccination programmes and prolong restrictive measures that preserve health security but depress economic activity.

A primary concern of health experts and governments related to the low public acceptance of a COVID-19 vaccine is the impact on the health system. Over the past month, infections increased in Barbados and the Eastern Caribbean and there has been a significant spike in hospitalizations and deaths in some countries. PAHO Director Dr. Carissa Etienne noted that "small islands in the Caribbean have limited bed capacity in intensive care units, along with limited numbers of specialized doctors; our health systems will become overwhelmed very quickly." This poses significant risk to the stability and public health of the region and its people.

COVID-19 vaccines that have been authorized for Emergency Use Listing by WHO are highly effective at preventing severe disease, hospitalization, and death. But post-introduction studies also indicate that these vaccines have demonstrated prevention of both symptomatic and asymptomatic infection. Several studies also show a reduction – about 50% - in risk of transmission to members of the same household for Pfizer and AstraZeneca vaccines.

Accordingly, the vaccines likely reduce transmission, lowering the risk of disease in unvaccinated people, in addition to helping to stop the spread of variants.

In short, these vaccines will protect those who take them but also, to some extent, those that the vaccinated person encounters.

Vaccine hesitancy refers to a delay in acceptance or refusal of vaccines despite the availability of vaccination services. Reasons for delaying whether to get vaccinated range from practical issues to social norms and psychological factors that guide individuals' decision-making Vaccine hesitancy is complex and context-specific, varying across time, place, and vaccines. It is influenced by factors such as complacency, convenience, and confidence alongside pre-existing, yet variable, socio-cultural norms (including gender norms), religious affiliation, age, class etc.

Evidence from the behavioural, psychological, and social sciences demonstrates that people's motivations—their readiness, willingness, intention, or hesitancy—are based on the information they process; by how they think and feel (their perceived risk, worry, confidence, trust, and safety concerns); and by social processes (recommendations from health care providers, social norms, gender norms, equity, and information processing and sharing.

Previous research has found that communications focused on reaching those who are hesitant rather than those firmly opposed to vaccination will be most effective at increasing uptake while focusing on those firmly opposed to vaccination will exaggerate and may contribute to the problem.

Due to the complex nature of vaccine hesitancy, there is no single intervention strategy that can address all instances of vaccine hesitancy. Dealing with vaccine hesitancy within a country and/or a population subgroup requires at first an understanding of the magnitude and setting of the problem and a diagnosis of its root causes.

Vaccination forms a critical pillar in the road to recovery from the COVID-19 pandemic. Although the effective and equitable distribution of COVID-19 vaccines is a key policy priority, ensuring acceptance is just as important.

II. UN JOINT APPROACH TO ADDRESSING VACCINE HESITANCY

Working in accordance with the Management and Accountability Framework of the UN Development and Resident Coordinator Systems, this proposal combines 5 UN Agencies[3] –

[3] As the actions identified are implemented, should further country needs emerge to enhance vaccine roll-out and reduce vaccine hesitancy that draws on the expertise of other UN Agencies (e.g. ILO, etc.) these can be included to enhance the effectiveness and impact of this proposal.

PAHO, UNICEF, UNDP, UN Women, and ITU – under the oversight of the UN Resident Coordinator and technical lead of PAHO/WHO to support the government in Barbados and Eastern Caribbean sub-region across 6 pillars of work to reduce vaccine hesitancy.

Drawing on the experience and comparative advantage of UN Agencies and exploiting the synergies between them to co-create actions and solutions under a joint work plan, this proposal aims to reduce vaccine hesitancy by supporting governments' more efficiently and effectively in the following areas:

a. Research and policy options
b. Behavioural change strategies
c. Risk communications and advocacy
d. Strengthening COVID-19 Vaccine Rollout
e. Vaccine Motivation
f. Monitoring and evaluation

The activities of the participating UN organizations are consistent with the new Agency country development and joint country implementation plans to support governments build human resilience against COVID-19 and expedite the socio-economic recovery of this sub-region through achieving herd immunity and the relaxation of restrictions imposed to curtail the spread of this virus.

Timely monitoring and direction throughout the course of this programme will follow a common and agreed governance structure. Accountability for the results and impact of this proposal is with the resident coordinator, supported by the resident coordinator's office, while technical lead management resides with the lead agency, PAHO.

Working to a joint work plan, budget, and result framework, the supervision of operationalizing this proposal will be through timely steering group meetings, co-chaired by the Resident Coordinator and a member state representative. Day-to-day management will be monitored by the lead technical agency working in collaboration with the participating UN organizations.

III. AGENCIES' CURRENT APPROACH TO ADDRESSING VACCINE HESITANCY

Since the approval of COVID-19 vaccines for emergency use and with the arrival of vaccines via the COVAX Facility, Barbados and the Eastern Caribbean countries have been rolling out COVID-19 vaccines as of March 2021. However, after initial strong uptake, the countries have been experiencing delays in acceptance or refusal of vaccines despite the availability of vaccine services.

Except in a few countries and population groups, COVID-19 vaccinations are not mandatory, and thus public willingness to be vaccinated against COVID-19 is of high priority to achieving the goal of reaching "herd immunity". To this effect, the UN System has deployed various strategies to tackle "vaccine hesitancy "scepticism and refusal to COVID-19 vaccines.

a. Risk Communication and Engagement

Recognizing that persons who are hesitant about taking the vaccine need real-time evidenced-based information by experts, some agencies of the UN System have been supporting countries in this regard. For example, UNICEF contracted a consultant to engage key experts from the medical fraternity and from the Christian faith to host webinars for Faith-Based Organizations (FBO) across the Eastern Caribbean on COVID-19 vaccines and the church. UNICEF has also supported the Ministry of Health in St. Vincent and the Grenadines to engage experts with persons from the cosmetology sector, recognizing that they are key influencers for some demographics in the communities across St. Vincent and the Grenadines. UNICEF and PAHO also supported training in Risk Communications for Health Care professionals in St. Vincent and the Grenadines.

Launched 21 May 2021, these communication materials -around the theme "Vaccines Bring us Closer - Choose to Be Vaccinated" - include videos, social media cards, and radio public service announcements. The main topics covered are: How vaccines are developed; How vaccines work; Vaccine safety; Side effects of vaccines; and the benefits of vaccines. This is being rolled out on social media and various media houses.

b. Strengthening COVID-19 vaccine roll-out

Community vaccination interventions. UN Agencies have also been supporting countries' vaccination roll-out. With support from UNICEF, vaccination pop-up clinics are being held in 6 communities in Barbados. The aim is to make vaccines more accessible to those who are currently unvaccinated. This has been done by outfitting the mobile vaccination unit as well as providing stipends for the volunteers working with this unit. UNICEF has also supported community vaccination drives in St. Vincent and the Grenadines. Grenada, St. Lucia, and Dominica are also being supported by UNICEF in their community vaccination program through the provision of stipends for community vaccination volunteers

Strengthening capacities of the EPI (Expanded Program on Immunization) The technical capacities of the Health Care Worker delivering the COVID-19 vaccines plays an important role in the decision to be vaccinated. PAHO has been supporting the continuous training through, virtual Webinars and in-country missions, of EPI managers and their team to ensure the approach being used is evidence-based.

Provision of cold Chain equipment: with PAHO support countries have also been supported with the provision of cold chain equipment to facilitate vaccine storage.

c. Advocacy and Behavioural Change Strategies

Behaviour Change Communication (BCC) Campaigns PAHO in collaboration with UNICEF have developed a sub-regional campaign to address some of the gaps in knowledge and concerns on the COVID-19 vaccines which may lead to vaccine hesitancy.

National BCC campaigns.

In addition, individual countries have been supported by UNICEF and PAHO in the development of national BCC campaigns aimed at persuading persons to get vaccinated. UNICEF has provided support to national campaign development and dissemination in Antigua and Barbuda, St. Vincent and the Grenadines, the British Virgin Islands, and Barbados. These materials include COVID-stories of testimonies of persons who were affected by COVID-19. In particular, for Barbados, the Ministry of Education has been supported in the development and dissemination of a campaign to increase uptake for child and young person's vaccination. Social media cards with messages as well as messages for electronic billboards and other IEC materials have been developed.

PAHO has also supported the Development of a Conversation Series- "A Matter of Fact", this series, designed to inform and educate, features top experts on various topics related to vaccine hesitancy such as: Vaccination in Children, Effectiveness of the Vaccines, Side Effects of COVID-19 vaccines, new vaccine platform of the COVID-19 vaccines, etc.

Updated Website: Recognising the WHO/PAHO are perceived as credible sources of information, PAHO ensures that its website is updated, and information is readily available for public use, on facts related to vaccines.

In November 2021, under the Caribbean ICT Campaign to Combat COVID-19 and Mental Health Misinformation project, the ITU supported by PAHO, will form an agreement with the telecommunication operator Digicel, to share accurate and verified messaging related to COVID-19 and vaccination hesitancy via SMS, television ads, and digital media wraps.

d. Research and Policy Options

Research on Vaccine hesitancy. UNICEF and PAHO have also been supporting countries to understand the factors that contribute to vaccine hesitancy. As evidence was showing that vaccine hesitancy was strong among Health Care Workers: PAHO Sub-regional Office in coordination with the ECC office, led the process of conducting a regional survey aimed at identifying the main factors associated with vaccine hesitancy. The results of the survey provided inputs for the development of communication and policy interventions and policy messages.

PAHO also supported a Vaccine Hesitancy Survey among Health care workers in Saint Vincent and the Grenadines: A communication campaign is being rolled out based on the inputs of the survey.

In Antigua and Barbuda, UNICEF also supported the Ministry of Health to conduct a vaccine hesitancy survey and feedback from persons who had taken their first doses of the COVID-19 vaccine. UNICEF has currently contracted CADRES to conduct a survey in 7 countries (Barbados, Dominica, Grenada, Montserrat, St. Lucia, St. Vincent, and the Grenadines and Trinidad and Tobago to understand the reasons for hesitancy about COVID-19 and hesitancy about child and young person's vaccination among parents and caregivers.

UNDP in November 2021 will support the research on vaccination as a driver for socio-economic recovery in Barbados and the Eastern Caribbean to assess the historic, sociocultural, environmental, health system/institutional, economic, and political, demographic, and personal perception and health determinants of vaccine hesitancy and under-immunization in Barbados and the Eastern Caribbean using a vaccine hesitancy determinants matrix. In addition, the knowledge gained as the necessary background to design and submit behavior change communication strategies and to design other tailored interventions to address vaccine hesitancy in Barbados and the Eastern Caribbean.

UN Women and ECLAC are completing a survey with ITU's support to disseminate. The survey should provide sex-disaggregated data on self-identified causes of vaccine hesitancy.

e. Monitoring and Evaluation

Monitoring. UNICEF has engaged a contractor to conduct social media monitoring so that countries can be provided with real-time intervention to address myths and misinformation that will fuel vaccine hesitancy. UNICEF will also be using its U-report platforms to obtain real-time information from young people on the COVID-19 vaccine

IV. THEORY OF CHANGE

The theory of change for vaccination against COVID-19 is the same as for other vaccinations. It consists of factors influencing an individual's motivation towards getting vaccinated, and those that bridge the intention-action gap leading to an individual getting vaccinated (see **Figure 1**).

Individuals' motivations are driven by the way in which they think and feel as well as social processes that influence their behaviours. Specifically, individuals' beliefs on risk and anticipated regret from catching COVID-19 are important drivers to how individuals form their thoughts when deciding to get vaccinated. The effectiveness of vaccines or concerns about the safety of vaccines will undermine individuals' confidence in them and their drive to get vaccinated. Attitudes towards vaccination are also associated with individuals' trust in vaccine providers or the healthcare system through which they are provided.

Together with thoughts and feelings, social processes also influence individuals' motivation to get vaccinated. Social processes can bear on the motivation of individuals through several channels. Social dyads such as the relationship between patient and provider can be important to reduce hesitancy if they build trust. Effective vaccine providers will recommend vaccinations to their patients, and the way in which they interact is critical to how motivated individuals are to take the vaccine. Another important social dyad is the relationship between parents and children as parents make decisions about vaccinating on behalf of their children.

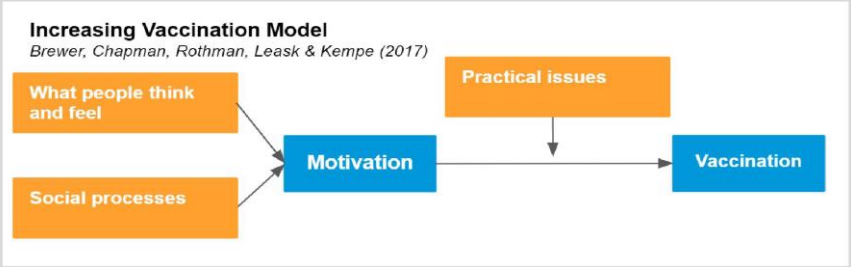
Other social processes include social networks that can play an important role in how individuals form their vaccination attitudes and behaviours. By conferring with family members, friends, and members of their social network face to face or over social media, vaccination attitudes can be influenced by the thoughts and feelings of others making vaccination decisions a part of their social

identity. Similarly, individuals tend to form their behaviours based on the social norms that can be influential.

Notably, while there is no evidence to indicate that one sex is more inclined to receive or reject the vaccine, gender identity, and the associated or perceived concerns, priorities, or stereotypes of men and women can influence a person's willingness to get the COVID-19 vaccine. These would also intersect with persons' class, ethnicity, age etc. that contribute to one's perceptions, risk level and lived reality. Gender-responsive, as opposed to gender neutral, communications, education, and logistical operations (i.e. the process of getting one's vaccine) are critical to converting vaccine hesitancy into vaccine willingness, and to both addressing and responding to the real fears, queries and practical obstacles of men and women in receiving their COVID-19 vaccine.,

Individuals' motivation towards getting vaccinated may also reflect strategic behaviors, notably altruistic behaviours to shield others from infection or a temptation to free-ride on the protection provided by others can influence individuals' motivation.

Figure 1: Theory of Change for the Increasing Vaccination Model



Despite best endeavours to motivate individuals towards vaccinations, individuals may still not take the final step of getting vaccinated. While motivated to do so, practical issues and obstacles may still result in individuals not getting vaccinated, with further measures needed to support individuals bridge the intention-action gap. These may come in the form of direct actions that leverage but do not try to change, what people think and feel – by reminders, prompts, and primes – together with other measures that reduce barriers – logistics and healthy defaults. Ensuring these measures are gender-responsive is critical to their effectiveness and bridging the intention-action divide.

This situation requires urgent action at the national level and therefore there should be a tripartite approach including government agencies, civil society organizations, and private sector service providers (backstopping in communications, and other goods and services).

Beyond these, stronger or more costly measures may be required to shape behaviors with incentives, sanctions, and requirements. Strategies that restrict individuals' choice about their vaccination behaviour can include the imposition of vaccination requirements that determine access to work, school, or area of residency.

A World Health Organisation Technical Advisory Group 2020 meeting on COVID-19 vaccine acceptance concluded that strategies to reduce vaccine hesitancy should focus on *creating a*

conducive enabling environment, *harnessing social influencers*, and *taking measures to increase the motivation of people to get fully vaccinated* which accord well with this theory of change.

For the Eastern Caribbean, the outcome and impacts resulting from reduced vaccine hesitancy can be measured in terms of reduced hospitalizations and fatalities from COVID-19; reduced spread and mutations of the virus; a timelier revival of economic activity, and social cohesion as COVID-19 restrictions are relaxed and socio-economic activity increases.

V. PROJECT PROPOSAL

OBJECTIVES:

To support governments in the Eastern Caribbean identify and understand the drivers of COVID-19 vaccine hesitancy and to take measures to increase the uptake of COVID-19 vaccines.

STRATEGIC PILLARS

1. Research and Policy Options

It is well known that research plays a fundamental role in the delivery of safe, efficient, effective, accessible, and timely health care services. Research, social data collection, and capacity building can help to develop credibility by helping in the development of skills and confidence and enabling evidence-based recommendations and interventions. Research and Social data collection will aid to understand community risk perception and behavioural indicators for COVID-19 vaccine hesitancy, which becomes essential during the planning phase. While capacity-building encourages local individuals to act on COVID-19 vaccination-related issues by strengthening confidence, knowledge, skills, and resources. These activities provide a strong evidence base that will help to determine and develop new strategies, policies, or operational processes.

Proposed Activities	Target Audience
Conduct desk review of available studies and surveys (from COVID-19 RCCE, immunization-specific surveys, formative research, etc.)	Program managers
Conduct social listening (social media sentiment analysis, helpline data, community feedback, etc.)	government health planners; public
Support governments with the collection of data via the dissemination of surveys via SMS	Mobile Phone Users/Public
Formative research to collect qualitative data	Caregivers, community leaders, religious leaders and influencers, health workers, Health workers, caregivers
Capacity building in informative research gender statistics / sex-disaggregated data collection and survey design.	Researchers; think tanks, research institutions, and journalists
Support for the development of policies and institutional/legal arrangements to address obligations of electronic communications service providers to disseminate messages in times of national-level disasters and public health crises	Electronic communications regulators, service providers, and government policymakers, and civil society organizations

2. Behavioural Change Strategies

Fully understanding the drivers for COVID-19 vaccine hesitancy is not without its challenges, especially when we consider the global context of hesitancy having been on the rise in recent years. There is evidence to show that identifying the drivers of vaccine hesitancy is complex and context-specific, varying across time, place, and vaccine and which can be influenced by factors such as complacency, convenience, confidence, and calculation.[4]

To counter these challenges a greater understanding is needed of the reasons why vaccine hesitancy exists. Behavioural insights provide an approach to designing solutions that are based on evidence to enhance an individual's decision-making with respect to this issue.

The activities proposed to constitute a strategic engagement with governments to not just develop solutions that address the current levels of vaccine hesitancy but also to develop the capacity and capability to develop effective behavioural strategies in the future. Working with health ministries, statistical agencies, and communications departments, it is first necessary to fully understand the challenge – the extent of vaccine hesitancy – as well as define the behaviours of interest. This will involve assessing what the target outcome is and identifying the behaviours we want to influence to support individuals make decisions that move vaccine uptake levels closer to the target. Also, through survey evidence and other methods, information on the key groups that we want to

[4] Lane (2018) *et al.*

influence as well as by how much can help governments set their policy ambition and planning resourcing.

Proposed Activities	Target Audience
To undertake or engage government health ministries and statistical offices to conduct evidence-gathering methods to understand the level of vaccine hesitancy; key groups where influence is needed; the biases driving hesitancy and other factors relevant to the intention-action gap.	Government health planners, and statistical officers.
To engage behavioural science experts to assist countries in identifying the behavioural driver of vaccine hesitancy	Government officials
Support the government to design gender-responsive behavioural policy interventions.	Government's health planners
Support governments to develop national behaviour change campaigns	Government's health planners
Support governments with the collection of data via the dissemination of surveys via SMS	Mobile Phone Users/Public
Promote the use of BIP App used to disseminate COVID 19 vaccine related information directly to the cell phones of the App subscribers.	Mobile phone users
Engagement of Social media personnel to give testimonials and to help spread the message on the importance of being vaccinated	Social Media users
Engagement of different cultural groups and youth groups such as sports associations to help spread the word on the importance of being vaccinated.	Youth and Adolescents

This proposal will also support governments to undertake careful analysis to establish what biases – cognitive, attention, motivational – are driving vaccine hesitancy either directly or indirectly. It is proposed that specialist skills are made available to the government that helps develop a strategic action plan to increase individuals' motivation to reduce vaccine hesitancy as well as to support individuals to overcome the intention-action gap.

Activities will include the promotion of digital means to disseminate information. Example BIP App used to disseminate COVID 19 vaccine related information directly to the cell phones of the App subscribers. As an extension a bar code for ease of download of this app will be placed at various ports of entry and at strategic locations such as supermarkets etc. Use of broadcast messages is also used to help facilitate dissemination of vaccine information.

3. Risk Communication and Advocacy

Risk communication can be defined as the interactive process of exchange of information and opinions among individuals, groups, and institutions concerning a risk or potential risk to human

health or the environment.[5] It provides individuals with the information necessary to make informed decisions about risk. For risk under social control, successful communication can help ensure the diffusion of knowledge among individuals. The containment of risk communication depends on what audience members intend to do with it. The goal of communication recipients includes: advice and answers (some individuals are waiting to be told what to do); obtain numbers (some individuals prefer quantitative summaries of expert knowledge), and processes and framing (if individuals want to learn about the risk and how it can be controlled).[6]

Research has found that the higher the trust, the lower the estimate of risk and the higher the estimate of benefits. When individuals perceive themselves to be at risk, they understand and put into practice only those messages that come from sources they perceive as trustworthy and credible.[3] This is how risk communication plays an important role to address vaccine hesitancy. It is a real-time exchange of information between experts and individuals who face a threat by applying a mix of communication tools, engagement strategies, and tactics.

Proposed Activities	Target Audience
Institutional capacity development on inclusive and gender-responsive risk communication.	Senior Government Officials and Communications Specialists
Development of and strengthening a network of media houses and journalist	Media houses and journalists
Technical assistance for developing press releases, organizing webinars and media briefings, developing fact sheets and other content using a verified data approach.	Institutions' Communications Specialists
Engagement with influencers to promote science/data based verified public information on vaccines	FBO, Athletes, entertainment sector
Negotiations and agreements with the national and regional telecommunication service providers surrounding the dissemination of public health and safety content especially during emergencies.	Telecommunication service providers
Expanded bandwidth to facilitate the real-time exchange of information via new media and modern electronic communications platforms	Telecommunications policymakers and telecommunications service providers

4. Strengthening COVID-19 vaccine roll-out

As vaccine supply is delivered it is essential to have a roll-out plan to ensure the broadest possible coverage for the communities. A strong COVID-19 vaccine roll-out focusing on increased trust will reduce mistrust around vaccines, the vaccination process, and the need for vaccines while removing roadblocks that may disincentivize, or prevent, persons from getting vaccinated.

[5] Risk Communication: A handbook for communicating environmental, safety, and health risks.

[6] Risk Communication: A mental model approach

Confidence quality in the delivery of the COVID-19 vaccines plays an important role in the decision to be vaccinated:

Proposed Activities	Target Audience/Comments
Develop capacities on interpersonal communication, vaccine preparation, and delivery and ensure HCW are updated on new vaccines	EPI Manager and of HCW working in the EPI (Expanded Program on immunization), Health Care Workers
Strengthen vaccine supply and logistics	EPI Manager and of HCW working in the EPI (Expanded Program on immunization)
Strengthening the Surveillance of Events Supposedly Attributable to Vaccination or Immunization (ESAVI)	EPI Manager and of HCW working in the EPI (Expanded Program on immunization) and epidemiologists.
Collaborating with private doctors, (Obstetricians/gynaecologist, paediatricians, infectious disease specialist and internist) to promote vaccine uptake	Private physicians
Support the innovative strategies for vaccine deployment as part of a comprehensive approach to Primary Health Care programs	Health Care Workers
Engagement of Herbalist and Naturalist, to promote and refer persons to be vaccinated	Alternative doctors

***Develop capacities on vaccine preparation and delivery and ensure HCW are updated on new vaccines*.**

It is important that healthcare professionals receive the training needed to effectively meet the demands of their roles. Training must be ongoing as new COVID-19 vaccines become available and as vaccine recommendations evolve when we learn more about the vaccines and how to improve the vaccination process. All health workers involved in the implementation of COVID-19 vaccination need to have adequate knowledge and skills in order to ensure safe and efficient COVID-19 vaccine administration. The proposal will roll out, among other things, the COVID-19 vaccination training for health workers package for frontline health workers in countries. The package, developed in collaboration with UNICEF, consists of 6 modules, which include video lectures, quizzes, job aids, interactive exercises, and downloadable presentations with the available information.

The proposal will also include webinars to updates on the Strategic Advisory Group of Experts on Vaccines (SAGE) and other recommendations, and training on cold chain management.

Strengthen vaccine supply and logistics

Supply chain readiness is key to efficiently deploying COVID-19 vaccines to the target populations in line with defined vaccination strategies. Potential variations in the storage temperature requirements of different COVID-19 vaccine products requires effective operations and suitable resource requirements. The proposal will support countries in compiling information

on the available cold chain capacity, including surge capacity, to develop the vaccine deployment strategy and to mobilize resources to fill the identified gaps. The proposal will also support the development of standard operating procedures (SOPs) and management protocols to ensure the quality and integrity of the COVID-19 vaccines and ancillary products throughout the supply chain.

The proposal will also aim to provide cold chain equipment (CCE), temperature monitoring devices, and capacity development in vaccine inventory management and monitoring mechanisms, and waste management.
(WHO/UNICEF COVID-19 vaccination: supply and logistics guidance INTERIM GUIDANCE 12 February)

Strengthening the Surveillance of Events Supposedly Attributable to Vaccination or Immunization (ESAVI)
The role of vaccine safety surveillance during COVID-19 vaccine introduction is to facilitate the early detection, investigation, and analysis of adverse events following immunization (AEFIs) and adverse events of special interest (AESIs) to ensure an appropriate and rapid response. This will decrease the negative impact of these events on the health of individuals and the immunization programmes and maintain the confidence of health care professionals and the general population.

The proposal will aim to support the establishment of the National Vaccine Safety Committee and develop capacities to detect serious AEFIs/AESIs rapidly to provide timely data that can be shared with relevant stakeholders for action; generate data to characterize the safety of the COVID-19 vaccines in use; identify, investigate, assess and validate safety signals and recommend appropriate public 12 health or other interventions; and support public and stakeholder confidence in vaccines and immunization by ensuring high-quality safety surveillance. It will also include capacity development for crisis communication for vaccine safety-related events.

5. Vaccine Motivation

Individuals' motivation towards getting vaccinated is influenced by a variety of factors that affect the way we think and feel about the benefits of being vaccinated versus perceived risks on the safety associated with vaccines. These factors can affect an individual's confidence in the efficacy of vaccines as well as trust in vaccine providers leading to individuals delaying when they will decide to get vaccinated. These factors can be compounded by social processes and pressures borne from social dyads, social norms networks, and strategic behaviours.

The pervasive nature of digital media enables the near-instant transmission of information as well as misinformation globally. This can motivate socially desirable behaviours as well as socially undesirable ones. Fake news or even the over-conveyance of negative messaging can have an adverse impact on an individual's perspectives on vaccination. Correcting misinformation and restoring balanced evidence-based messaging using credible sources and platforms are important factors to support individuals to make better decisions. Ensuring this messaging is gender-responsive and inclusive is critical to capturing diverse populations.

Proposed Activities	Target Audience/Comments
Establishment of vaccine incentives mechanisms, based on country context	Individuals
Roll out of vaccine mobile clinics	Health systems and health care workers
Establishment of reminders mechanisms	Individuals
Support governments with the dissemination of verified, evidence-based content among a wide audience via SMS, television ads, digital media wraps	Digicel & Flow customers/Mobile Phone User/Public

Complementing these with other actions to help bridge the intention-action gap will develop a conducive enabling environment, such that motivated individuals take the final step to get fully vaccinated. Such practical measures may include actions that reduce the transaction costs – both financial and time – to increase the convenience of getting vaccinated.

6. Monitoring and Evaluation

WHO recommends that countries incorporate plans to measure and address vaccine hesitancy into their immunization programs. This requires that governments and health institutions be able to detect concerns about vaccination in the population and monitor changes in vaccination behaviours. To do this effectively, tools to detect and measure vaccine hesitancy are required. The complexity and context-specific nature, and variability across time and place make vaccine hesitancy measurement somewhat challenging.

Monitoring the rate of hesitancy is the first step to identify factors influencing acceptance of the COVID-19 vaccine, through them, identifying the principal interventions points to increase vaccine acceptance, vaccine confidence, consequently vaccination benefits.

Identifying specific populations and their characteristics with regards to vaccine hesitancy will help serve as key components of a successful vaccination strategy.

Proposed Activities	Target Audience/Comments
Adapt existing vaccine hesitancy measurement tools for Barbados and the Eastern Caribbean	Research institutions and researchers
Conduct a vaccine hesitancy survey in each country to identify the rate of hesitancy and principal hesitancy determinant.	Research institutions and researchers
Develop capacities in the use of the suggested tool to measure hesitancy.	Research institutions and researchers; Ministry of Health and Education and other stakeholders
Conduct Hesitancy social media surveillance	Office of Communications
Conduct vaccine hesitancy evaluations and measurement on the reach and impact of the activities on vaccine uptake, including in specific targeted groups (HCW, frontline workers, etc.)	Research institutions and researchers

Budget

The following represents and indicatives of the cost of the project based on gaps identified for the implementation of the outlined activities**.**

Promoting COVID-19 Vaccine Uptake and Addressing Vaccine Hesitancy in Barbados and the Eastern Caribbean						
Pillar	Activities cost per pillar	Cost	Available	Gap	Year of implementation	
					2021	2022
1						
	Sub-Total Pillar 1	$480,000	90,000	$390,000	70,000	410,000
2						
	Sub-Total Pillar 2	$827,000	465,000	$362,000	50,000	777,000
3						
	Sub-Total Pillar 3	$285,000	35,000	$300,000	40,612	244,388
4						
	Sub-Total Pillar 4	$640,000	210,000	$430,000	100,000	540,000
5						
	Sub-Total Pillar 5	$550,000	55,612	$494,388	55,612	494,388
6						
	Sub-Total Pillar 6	$400,000	70,000	$330,000	50000	350,000
	GRAND TOTAL	$3,182,000	$835,612	$2,346,388	$366,224	$2,815,776

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