



A New Approach to Health Emergencies

WelchAllyn

Inter-American Health Task Force White Paper



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ACRONYMS AND ABBREVIATIONS

Al artificial intelligence

CDC Centers for Disease Control and Prevention

ECLAC Economic Commission for Latin America and the Caribbean

EID emerging infectious diseases

FIND Foundation for Innovative New Diagnostics

GBV gender-based violence ICU intensive care unit

IFIs international financial institutions
IHR International Health Regulations

IPPPR Independent Panel on Pandemic Preparedness and Response

MDI misinformation and disinformation

ML machine learning

NCDs noncommunicable diseases
OAS Organization of American States

OECD Organization for Economic Cooperation and Development

PAHO Pan American Health Organization
PPE personal protective equipment
R&D research and development

RMNCH reproductive, maternal, neonatal, and child health services

SDGs Sustainable Development Goals
TFA Trade Facilitation Agreement

TRIPS (Agreement on) Trade-Related Aspects of Intellectual Property Rights

UNDP United Nations Development Program

VOC variant of concern

WHO World Health Organization

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EXECUTIVE SUMMARY

The Covid-19 pandemic has laid bare fundamental flaws in political leadership, coordination, and health policy integration in the Western Hemisphere. Moreover, the current geopolitical divides among governments in the region have undermined the few mechanisms in place for cooperation on health governance. The post-pandemic recovery would benefit from coordination and cooperation, both between and within countries.

Although national health systems, including those with universal health care, were not well equipped to cope with an epidemic of the magnitude of Covid-19, communities across the Americas expected their governments to make timely decisions; balance scientific, economic, and social factors; and protect their citizens from the virus and from the negative impact of the pandemic on livelihoods and well-being.

Understanding the Crisis Along Four Axes

The Covid-19 pandemic has underscored long-standing challenges in meeting all the capacities required by the International Health Regulations (IHR). Strengthening and investing in health systems is both a national and global priority for economic stability and security. Likewise, the pandemic has deepened the existing vulnerability of the medical product supply chain. The spread of the novel disease has been accompanied by global shortages of critical medical products, high prices, unfair competition, nationalism, and export bans. Moreover, the region is an example of inequalities in access to Covid-19 vaccines. The vaccines have arrived in Latin America and the Caribbean (LAC), but at a slow pace compared to North America, threatening, and prolonging their social and economic recovery.

Furthermore, the need for trustworthy information has never been greater and more urgent than during this pandemic. One of the key pillars needed to slow the spread of Covid-19, mitigate its effects, and underpin collective social responses is reliable sources of information.

Misinformation, disinformation, and conspiracy theories, which have spread widely, have contradicted, or dismissed the warnings and advice of the scientific community.

On the other hand, other factors have been used as an opportunity for health systems to be updated, including the use of big data, artificial intelligence, and telemedicine. Nevertheless, despite efforts by the Pan American Health Organization, health ministries, national statistics offices, multilateral organizations, agencies, and academic institutions, among others, the challenge of harmonizing and combining such diverse data systems remains an arduous task, particularly in some countries that lack sufficient resources, adequate infrastructure, and technical capacity. For these reasons, it becomes rather difficult to meet basic standards in areas such as accuracy, consistency, timeliness, transparency, completeness, and usability of data.

A New Take on Health Emergencies Cooperation and Coordination in the Western Hemisphere

The ability to respond regionally to the acute phase of the Covid-19 pandemic and recovery depends on coherent health governance that relies on the principles of **solidarity, transparency, trust, and sustainability** of cooperation across the region. Furthermore, there is an opportunity to address deficits in public health governance and enhance preparedness for future pandemics. Advantage should be taken of regional or subregional integration mechanisms to join forces and share experiences in epidemic prevention and control of future or existing diseases that could threaten people's security, particularly the most economically marginalized.

KEY MESSAGES - EXECUTIVE SUMMARY

- Leadership, governance, political will, and trust among countries in the Western Hemisphere are
 a necessary condition for success in fighting this pandemic and preparing for the next one. This
 may seem to be a major challenge in today's geopolitical environment. However, the devastating
 impact of Covid-19 on all communities and countries and the universal commitment to never let
 this happen again offer a common purpose and agenda for transformative change in global and
 regional collective action.
- The current Covid-19 pandemic raises important questions about the quality, transparency, sharing, and use of data, and it highlights the challenges associated with data use. High-quality data, transparency, and continued investment to ensure data protection are prerequisites for the analysis and use of big data and for the guarantee of value and exchange of open data and data protection and privacy.
- The world needs a new era of cooperation and collaboration for IHR implementation. It is
 imperative to enable transparent, independent, and regular assessments of the core capacities
 and preparedness of countries for future pandemics; understand gaps in performance of
 countries' responses to public health outbreaks; and support countries in prioritizing investments
 in health security and the strengthening of health systems.
- Ensuring equal access to Covid-19 health services and products in particular, vaccines would maximize social and economic recovery and bring the pandemic under control in the region. Therefore, all stakeholders should act to protect the populations with the greatest unmet need, provide further financial and in-kind support to COVAX, and ensure availability of Covid-19 vaccines, including by expanding production and manufacturing capacity, sharing intellectual property, and facilitating technology transfer.
- Controlling and managing the spread of misinformation, disinformation, and conspiracy
 theories. The best way to deal with the spread of misinformation is to put science at the forefront
 of all discussions. Misinformation, disinformation, and conspiracy theories are a growing
 threat that will ultimately require global and regional cooperative efforts among researchers,
 governments, and social media platforms.

PURPOSES AND RECOMMENDATIONS

The purpose of this white paper is to understand the lessons and challenges of the regional response to Covid-19 and appraise, in retrospect, how they were addressed and how they could have been addressed. The paper also makes specific recommendations. These recommendations are grouped into five areas geared toward improving cooperation and coordination in health policy to support regional Covid-19 response and recovery, as well as future health emergencies:

- 1. Promoting leadership and better governance in regional health emergencies;
- 2. Increasing access and sharing of high-quality data;
- 3. Strengthening regional health security by investing in national preparedness;
- Ensuring equitable access to Covid-19 health services and products, in particular vaccines, and;
- Controlling and managing the spread of misinformation, disinformation, and conspiracy theories.

FIGURE 1. SUMMARY OF SPECIFIC RECOMMENDATIONS FOR HEALTH EMERGENCIES COOPERATION AND COORDINATION IN THE WESTERN HEMISPHERE (SEE TABLE 1.)

A New Take on Health Emergencies

1. PROMOTING LEADERSHIP AND BETTER GOVERVANCE



- · Strengthen intra-governmental coordination
- · Support LAC regional and global health leaders meeting
- · Promote bottom-up leadership of health personnel
- · Shape a more sustainable economic recovery
- · Build renewed sense of centrality of health
- Bridge the gap between health care and social care

INCREASE ACCESS, SHARING, PROTECTION AND PRIVACY OF HIGH-QUALITY DATA



- · Assure national investments in well-being personnel to improve the quality of health data
- · Strengthen regional surveillance network
- Exchange periodic and transparent information
- · Strongly support sharing open data
- · Develop and strengthen digital health

3. STRENGTHENING REGIONAL HEALTH SECURITY



- · Establish periodical peer network for enforcement of IHR
- Strengthen investments in health systems
- Ensure health security remains among the top considerations in discussions with ministers of finance
- Expand existing CDC global health partnerships with the rest of LAC countries
- Support and ensure active participation in discussions on a legally binding Framework Convention for Pandemic Preparedness and Response

4. ENSURING EQUITABLE ACCESS TO COVID-19 HEALTH SERVICES & PRODUCTS



- · Strengthen national regulatory authorities in LAC
- Improve regional coordination on COVAX
- · Establish national stockpiles of medical supplies
- Incentivize and increase regional manufacturing capacity
- · Incentivize and strengthen regional procurement negotiations
- · Optimize the delivery of health services and platforms
- · Accelerate the implementation of the Trade Facilitation Agreement

5. CONTROLLING AND MANAGING THE SPREAD OF MISINFORMATION, DISINFORMATION, AND CONSPIRACY THEORIES



- Hold governments, international and regional health authorities accountable to promote information based on science
- Develop specific measures to counter misinformation, disinformation and conspiracy theories

INTRODUCTION AND BACKGROUND

America became a global epicenter of infections and deaths from the SARS-CoV2 virus and its associated disease, Covid-19, by mid 2020. The pandemic that started in Wuhan, China, quickly moved to Europe, Canada, and the United States. In time, it spread to Latin America and the Caribbean (LAC) with disastrous consequences. While Canada and the United States have reported more than 26,000 and 610,000 deaths, respectively, Latin America and the Caribbean, with only 8 percent of the world's population, have recorded more than one million three thousand deaths, or almost 30 percent of the world's total, and more as of July 23, 2021. About 89 percent of the deaths in the LAC region occurred in five countries: Brazil (44.3 percent), Mexico (22.1 percent), Colombia (8.3 percent), Argentina (7.3 percent), and Peru (6.7 percent). Of the remaining deaths, 3 percent were recorded in Central America and 1 percent in the Caribbean, according to the Pan American Health Organization (PAHO). Dr. Carissa Etienne, the director of PAHO, expressed it clearly: "This is a tragic milestone for everyone in the region."1

Although there is precedent for countries in the region to collaborate on health policy, Covid-19 has been addressed with unilateral responses. Countries adopted different strategies in their effort to contain the spread of the novel coronavirus. This led to a perverse competition in the early phase of the pandemic to procure critical medical goods, including personal protective equipment (PPE) and ventilators. While the marketplace for most of these and other critical supplies has stabilized, we are still at a risk that these patterns will prevail and adversely impact the access to and exchange of knowledge on critical issues such as effective medicines, clinical trials, and equitable access to vaccines. The World Health Organization (WHO) has called on countries to administer vaccines using priority health criteria. In the words of WHO Director-

General Dr. Tedros Adhanom Ghebreyesus, "all at-risk people in all countries, especially health workers, older people and those with underlying conditions, need access to vaccines – not all people in some countries."

Preexisting structural economic and social problems have amplified the negative impact of the Covid-19 pandemic in the hemisphere. This, in turn, has exacerbated those historic problems. According to the Economic Commission for Latin America and the Caribbean (ECLAC), by the end of 2019, several LAC countries experienced more than five years of economic slowdown, rising unemployment and informal labor rates (up to 54 percent), rising poverty, inequality, including the effects of low commodity prices, fleeing foreign capital, and weakening currencies.2 In 2019, the economic growth of the region stood at just 0.2 percent, and real gross domestic product (GDP) contracted by 8.1 percent in 2020, the worst among the world's major regions. In the case of the United States and Canada, real GDP fell by -4.3 and -7.1, percent, respectively, in 2020. In the same period, the global economy declined by -4.4 percent.3

This is linked to the fact that the Americas region has been significantly affected by the Covid-19 pandemic, even though it is a global champion of leading vaccination programs to eliminate common infectious diseases such as smallpox, measles, and rubeola and having a well-placed Pan-American Health Organization (PAHO), in dual identity as a specialized health agency within the inter-American system and the WHO Regional Office for

^{1.} Pan American Health Organization and World Health Organization, "Latin America and the Caribbean Surpass 1 Million COVID Deaths," PAHO, May 21, 2021, https://www.paho.org/en/news/21-5-2021-latin-america-and-caribbean-surpass-1-million-covid-deaths.

^{2.} Economic Commission for Latin America and the Caribbean, "Reconstruction and Transformation with Equality and Sustainability in Latin America and the Caribbean," October 26, 2020, https://periododesesiones.cepal.org/38/sites/pses38/files/20-00652_ses.38_reconstruction-transformation_web.pdf.

^{3.} International Monetary Fund, "Real GDP Growth Annual Percent Change," International Monetary Fund, June 11, 2021, https://www.imf.org/external/datamapper/NGDP_RPCH@WEO/OEMDC/ADVEC/WEOWORLD/CMQ/WE.



the Americas. This can partially be understood in light of the fact that the region has the world's highest income inequality.

While the estimates predict a financial and economic recovery in the Americas from 2021 onward, the social effects of Covid-19 could be more dramatic for Latin America and the Caribbean in the long term. In addition to Covid-19, the region is grappling with the challenges posed by migration in Central America, as well as the Venezuelan situation, as many people struggle to survive in extremely precarious situations. These crises are taking place within a surge of populism, nationalism, xenophobia, and authoritarianism, a combination that threatens democracy, political stability, and human rights.

Central America and the Caribbean bear the additional risk posed by natural disasters, shown by the recent devastation of Hurricanes Eta and lota in November 2020. Hazards such as meteorological and natural disasters will continue to coexist and interact with the effects of Covid-19. These interactions challenge the resilience and recovery of the social, economic, and environmental structures in the region after Covid-19. Resolving political priorities in response to the Covid-19 pandemic and the effects of natural hazards requires a complex decision-making process that must inevitably be guided by scientific evidence. ⁴

Progress in poverty reduction has been reversed, as have the gains in gender equity in the region. The World Bank estimates that between 119 and 124 million people fell into poverty in 2020 globally because of the pandemic. In 2021, this figure is set to increase from 24 million to 27.6 million in Latin America and the Caribbean. According to World Bank surveys, female workers were 44 percent more likely than male workers men to lose their jobs at the start of the crisis. The biggest concern was the significant increase in cases of gender-based violence (GBV) and the greater

We need to capitalize on what is undoubtedly a global public health moment and introduce not only short-term, marginal improvements, but fundamental structural changes into the global health system so it can better protect everyone in our deeply interdependent planet.

Julio Frenk, Co-chair, Inter-American Health Task Force, First Virtual Meeting, March 2, 2021

difficulties in accessing assistance during the pandemic. Throughout the region, international organizations have worked with authorities, police, the private sector, civil society, and local communities to develop innovative ways to tackle the rising GBV rates.

It is in the interest of the region that the social and economic needs of the most vulnerable and marginalized are met to overcome the Covid-19 crisis. The region needs to be equipped with new financial instruments for a sustainable recovery that facilitates access to critical medical goods and a regional accelerated approach to ensure equal access to Covid-19 vaccines without excluding migrants.

The region needs to rebuild health, social, and economic systems in ways that follow international guidelines and are supported by research and science. Health emergencies will continue to challenge the region due to the global climate crisis and the unsustainability of current

^{4.} Mark C. Quigley et al., "A Multi-Hazards Earth Science Perspective on the COVID-19 Pandemic: The Potential for Concurrent and Cascading Crises," Environment Systems & Decisions 40, no. 2 (May 16, 2020): 199–215, https://doi.org/10.1007/s10669-020-09772-1.

^{5.} Christoph Lakner et al., "Updated Estimates of the Impact of COVID-19 on Global Poverty: The Effect of New Data," WORLD BANK BLOGS, August 7, 2020, https://blogs.worldbank.org/opendata/updated-estimates-impact-covid-19-global-poverty-effect-new-data.

^{6.} The World Bank, "COVID-19: The Costly Setback in Latin American Women's Progress," World Bank, March 4, 2021, https://www.worldbank.org/en/news/feature/2021/03/04/la-covid19-costoso-retroceso-en-los-avances-de-la-mujer-latinoamericana.

economic patterns. Likewise, governments and experts need to focus on reliable information and measures that promote target-specific interventions to develop accurate risk perception, and therefore, a more significant commitment to community protective behavior. It is crucial to stimulate group identity and the sense of belonging of citizens to achieve more successful results. The significant impact and relatively successful response in Asia-Pacific countries can be attributed to their experience with infections, such as the Severe Acute Respiratory Syndrome in 2003, where the population experienced preemptive containment measures and strong central government.

Why focus on enhancing post-Covid-19 cooperation and coordination in the Western Hemispheric? While Covid-19 is an unfolding event, and there is uncertainty about how the world will look when the pandemic ends, high-quality international and regional cooperation must be put in place to successfully address current and emerging challenges.

The Guiding Principle: "Health is the Greatest Wealth"

The Roman poet Virgil coined the famous phrase, "The greatest wealth is health." As a global health crisis that has paralyzed the world unfolds, the importance of placing health at the center of all investment priorities is unquestionable, to address the links between social, economic, and environmental systems.

Sustainable economic development is not possible without investment in health. Covid-19 reminds us that human

capital is the most valuable source of economic mobility. But human capital needs to be understood as part of a healthy planet. Human health protection is linked to the effects of human economic activities that disrupt the balance between ecosystems and habitats.

The Covid-19 pandemic has signaled the relevance of other guiding principles in global governance of infectious diseases. One Health, whole-of-government and health-in-all-policies approaches have been on the global health agenda but mostly unknown and, in some cases, slightly implemented by public policy decision-makers and entrepreneurs in setting economic policies and strategies.

"Health is the greatest wealth" is the guiding principle of the Inter-American Health Task Force. In a rich, biodiverse region, the Covid-19 recovery offers an opportunity to advance in achieving the Sustainable Development Goals (SDGs) by strengthening the accessibility and resilience of health systems.

Purpose of the Task Force

The Inter-American Health Task Force strives to analyze and identify specific recommendations to improve cooperation and coordination in health policies to support regional preparedness, readiness, monitoring, and response for future health emergencies in the Western Hemisphere. The work of the Task Force members was carried out through virtual exchanges, including two meetings that took place on March 2, and May 4, 2021, and were supported by a Steering Technical Director and Technical Associate of the Inter-American Dialogue.

This white paper has been made possible with the generous support of the Inter-American Development Bank, UnitedHealth Group, and the World Bank.

The social effects of Covid-19 could be more dramatic for Latin America and the Caribbean in the long term.



1. SETBACKS IN REGIONAL COOPERATION AND COORDINATION IN THE TIME OF COVID-19

Covid-19 could be considered a case study of political missteps. Although national health systems, including those with universal health care, were not well equipped to cope with an epidemic of the magnitude of Covid-19, communities across the Americas expected their governments to make timely decisions, balancing scientific, economic, and social factors to protect their citizens from the virus and from the negative impact of the pandemic on livelihoods and well-being.

1.1. Inadequate Political Leadership, Coordination & Planning

In times of crisis, governments and politicians have the primary responsibility to lead national responses and to communicate the information to citizens on the basis of the best available scientific evidence. The initial response of Covid-19 was negligent in some cases, resulting in millions of preventable deaths and high social and economic costs.

While facing crises is a task that political leaders must be prepared for, it is not an easy or straightforward endeavor, particularly when crises emerge suddenly. When leaders focus on returning to normalcy, bias in seeing the crisis as a slow-developing event can lead them to underestimate both the possibility of a crisis and the impact it could have.

As a result, Covid-19 has evolved from a health crisis to a global political crisis. The shortcomings of government leadership, including its role in multilateral institutions, have impacted the public's willingness to cooperate in containing the spread of the virus and opened the door to

misinformation and conspiracy theories. In the case of the Americas, the crisis was exacerbated by shared factors of nationalism and unilateralism by the leaders of the major economies - mainly Brazil, Mexico, and the United States.

1.1.1. WEAK GLOBAL SOLIDARITY UNDERMINES REGIONAL COOPERATION

The social and economic effects of Covid-19 have surpassed those of other emerging infectious diseases (EIDs) identified since the 1918-19 Great Influenza (H1N1). Paradoxically, the current pandemic is taking place in the age of big data, global scientific evidence, and established multilateral organizations and agreements to cooperate and coordinate in response to health emergencies - resources that were not available in the past.

Despite these global assets, the unknown origins of Covid-19 and the slow dissemination by the Chinese government of information on the virus hampered initial international efforts to curb the spread of the disease. This exacerbated the existing political confrontation between China and the United States, impacting trust in multilateral mechanisms to put in place a swift global response to the disease. As a result, some Western Hemisphere and European countries underestimated the initial warnings about the severity of Covid-19, leading to a divided response that did not prevent the disease from spreading rapidly and widely, with countless effects in developing countries.

By comparison, the scientific community has provided a clear example of how cooperation and technology have been key to overcoming the crisis. The pressure on the economy and public health has led to the belief in the importance of open science and global cooperation.

Technology and the availability of information have been crucial for combating the spread of the virus and possible new mutations. Free access to the latest updates has led scientists and governments to reduce duplication of efforts and waste of resources. Open data and shared information have clear benefits, of which rapid development of vaccines is probably the most important.

Ever since the first report in China of a brand-new cause of pneumonia, molecular biology has mounted a quick response to offset the spread of the virus and alert the scientific community. The first genome sequence was made public, and scientists worldwide have since been able to compare and analyze the virus's biology. Using computational tools and bioinformatics, scientists have also shared research advances, including essential replication and transcription of virus enzymes, protein synthesis pathways, pathogenesis, and virus mutations.

Politicians, however, have failed to form an international alliance and take global action against the virus. Regrettably, this pattern has also prevailed in the Americas. Despite the existence since 1902 of PAHO, established at the First International Sanitary Convention of the American Republics, Western Hemisphere countries have not been the exception to these costly political failures.

The decline of US leadership during the administration of former president Donald Trump and its self-isolation in global health matters of the Covid-19 crisis significantly impacted a coordinated response. In the past, the United States has led the political and scientific cooperation and coordination agenda to face health emergencies worldwide. As the pandemic moves to new stages, with the emergence of successive waves of contagion, and with a more robust, evidence-based action plan on prevention and treatment, there are growing expectations that the new US administration will boost cooperation both regionally and globally.

Ana Covarrubias, a professor and researcher at the Center for International Studies of El Colegio de Mexico, argues that "COVID-19 was an external shock that might have triggered cooperation and coordination of national policies in [the] America[s], not only on health issues, but also on borders, trade, immigration, economics, etc. However, there was almost no regional policy to tackle the crisis. Public policy responses remain directly in the national sphere. Most regional organizations have limited their reaction to providing information about the general

The shortcomings of government leadership, including its role in multilateral institutions, have impacted the public's willingness to cooperate in containing the spread of the virus and opened the door to misinformation and conspiracy theories.

situation of the pandemic and communicating national policies implemented by member states."⁷

The 2015-2016 Zika virus outbreak in the Americas was an example of the efforts made by public authorities to meet the International Health Regulations (IHR) requirements. The solidarity and timely collaboration shown by countries at the time were essential to responding to a large-scale outbreak. Nevertheless, the lessons that emerged from the Zika outbreak and other recent global health outbreaks – SARS in 2002-2003 and Ebola in 2014-2016 – were not relied upon in the initial Covid-19 response in Western countries.

The world is tightly interconnected, and regions can perform better when strong multilateral institutions have political backing. Countries are not adequately equipped to tackle a challenge such as Covid-19 on their own. Global and regional solidarity is needed to safeguard the international order based on international law. Governments need to stand by the core values and basic principles of multilateralism to cooperate and coordinate. In the response to Covid-19, a misguided approach of unilateralism and confrontation damaged the interests of all countries and threatened the well-being of all.

^{7.} Ana Covarrubias, "Regionalism and Covid-19," Inter-American Dialogue, July 29, 2020, https://www.thedialogue.org/analysis/regionalism-and-covid-19/.



1.2. Challenges to Intragovernmental Coordination at All Levels

In most of the world, Covid-19 has been met with nationalistic responses. Governments have responded to the pandemic by closing borders, restricting travel, and requiring quarantines for visitors. Covid-19 has also changed the way businesses operate, by accelerating the introduction of remote working and learning technologies.

The impact of the crisis has required leadership and action from subnational and local authorities. They have played a key role and, in some cases, have performed better by targeting testing and tracing groups, resourcing hospitals, allocating funds for health and social services, imposing, and easing restrictions, and managing the rollout of Covid-19 vaccines.

The Organization for Economic Cooperation and Development (OECD) highlighted the strong territorial dimension of the Covid-19 crisis: "Subnational governments – regions and municipalities – are at the frontline of the crisis management and recovery and, confronted by COVID-19's asymmetric health, economic, social and fiscal impact – within countries but also among regions and local areas."8

While subnational and local authorities are at the forefront of crisis management, the task of coordinating and connecting different actors to integrate efforts is a national responsibility. Coordination gaps between national and local authorities impair the effectiveness of the response.

Therefore, challenges to intergovernmental coordination have soared, delaying the successful implementation of adaptive Covid-19 preparedness and response strategies in some countries. The fragmented response has had a negative impact, increasing disjointed responses and competition for resources. That, in turn, has produced a highly asymmetric social and economic impact within subnational regions. It is also clear that the number of

cases and deaths reported differs significantly between countries and at subnational and local levels within countries.

1.2.1. MANAGEMENT CHALLENGES

Although many Latin American countries reacted faster to the pandemic than European countries and the United States, socioeconomic factors undermined public health responses. A study carried out in five Latin American countries - Brazil, Chile, Colombia, Ecuador, and Peru –highlights the lack of a comprehensive and effective national strategy and poor pandemic management in Brazil: "Public health response was not coordinated, and there was no federal policy enforcing physical distancing and isolation, or even guidelines to the states, since the central government could not agree on the strategy."

There were conflicting and mixed messages between national and subnational authorities, impacting public health responses, compliance, and countries' ability to contain the spread of the virus. After the first wave, several countries decided to implement local or targeted lockdowns to minimize the cost of national lockdowns. But dumping responsibility on subnational and local authorities with significant heterogeneity in the ability to track and monitor the disease, and release and update Covid-19 data, produced mixed results and thus undermined citizens' trust in authorities. Numbers of cases began to increase in most large cities in the Western Hemisphere.

Comprehensive national approaches are needed to minimize territorial inequalities, create more inclusiveness, and increase effectiveness in dealing with health emergencies. It is also essential to continue boosting national social safety nets. As the poor and other vulnerable groups suffer the worst consequences of the Covid-19 pandemic, governments must continue to expand social protection programs by enhancing national social safety nets to speed up the recovery of households, communities, and national and regional economies.

^{8.} Organization for Economic Cooperation and Development, "The Territorial Impact of COVID-19: Managing the Crisis across Levels of Government," November 10, 2020, http://www.oecd.org/coronavirus/policy-responses/the-territorial-impact-of-covid-19-managing-the-crisis-across-levels-of-government-d3e314e1/.

^{9.} María Alejandra Benítez et al., "Responses to COVID-19 in Five Latin American Countries," Health Policy and Technology 9, no. 4 (December 1, 2020): 525–59, https://doi.org/10.1016/j. hlpt.2020.08.014.

2: UNDERSTANDING THE CRISIS ALONG FOUR AXES

The Covid-19 crisis is a multicausal event that is more evident and striking in some regional, national, and local contexts. Some counties that seemed best prepared to detect and respond to a deadly virus have proved to be among the least able to prevent or control the spread of the novel virus nationally, internationally, or both. On the other hand, many countries still do not have the public health capacity to protect their populations and issue timely warnings to other countries and the WHO. Despite the record time for developing Covid-19 vaccines, unequal access to them is threatening and prolonging the recovery in developing countries. Misinformation, disinformation, and conspiracy theories have undermined citizens' trust and cooperation. By contrast, other factors have been seized as an opportunity for health systems to be updated, including the use of big data, artificial intelligence, and telemedicine.

2.1. Data Accuracy, Timeliness, Availability, Transparency, Consistency, Completeness

The pandemic has clearly shown the importance of reliable, comparable, timely, open and disaggregated data and statistics to tackle a crisis efficiently. Nevertheless, despite efforts by the Pan American Health Organization, health ministries, national statistics offices, multilateral organizations, agencies, and academic institutions, among others, the challenge of harmonizing and combining such diverse data systems remains an arduous task, particularly in some countries that lack sufficient resources, adequate infrastructure, and technical capacity. For these reasons, it becomes rather difficult to meet basic standards in areas such as accuracy, consistency, timeliness, transparency, completeness, and usability of data.

2.1.1. SURVEILLANCE: THE FOUNDATION FOR PREVENTION

The cornerstone of prevention and control measure of an infectious disease is epidemiological surveillance. "[I]nformation gathering for a disease requires the implementation of a unified case definition; the creation of standardized disease nomenclature; the codification of disease-related reporting, including data on illness incidence, patient clinical encounters, deaths, and laboratory test orders and results; the implementation of public health (PH) response operations; and the exchange of electronic data using semantically interoperable information."¹⁰

The basic components of surveillance for a health-related event are systematic collection, analysis, interpretation, and dissemination of information. Surveillance raises awareness about a disease, facilitates risk assessments based on the pattern of progression, and allows for the definition of preventive and control measures at local, national, regional, and global levels. Surveillance is also a tool for scientific research and a proven method for measuring the effects of changes in health care.

Although Covid-19 surveillance is essential in every country, it is even more critical for developing countries to have access to adequate information in order make the best decisions, often with limited resources. They must do more with less, given the lack of resources, insufficient training, and in some cases, poor quality and sustainable surveillance systems. Some of the main limitations include under-ascertainment/underreporting, lack of timeliness, and incomplete data.

^{10.} Macarena Garcia et al., "Centers for Disease Control and Prevention 2019 Novel Coronavirus Disease (COVID-19) Information Management: Addressing National Health-Care and Public Health Needs for Standardized Data Definitions and Codified Vocabulary for Data Exchange," Journal of the American Medical Informatics Association 27, no. 9 (September 1, 2020): 1476–87, https://doi.org/10.1093/jamia/ocaa141.



KEY MESSAGES - 2.1. DATA ACCURACY, TIMELINESS, AVAILABILITY, TRANSPARENCY, CONSISTENCY, COMPLETENESS AND PRIVACY

- Good data is a key pillar to manage and respond to health emergencies that have extreme
 socioeconomic impacts. To better serve policymakers, data must be consistent, accessible,
 and easy to interpret. At the onset of a crisis, rapid and real-time data collection often comes
 with high potential for error. International classifications are used to standardize health data, as
 they form the basis for evidence-based health care. Classifications are used by governments,
 researchers, health professionals, hospitals, laboratories, international organizations, insurance
 companies, civil society organizations, and private companies.
- Attention to vulnerable populations, such as women, children in poverty, and ethnic minorities, whose economic indicators have deteriorated significantly, has demanded an extraordinary amount of disaggregated data to design and direct specific measures. The pandemic has highlighted the importance of systematically monitoring and analyzing health inequalities.
- Evidence-based decisions might increase and maintain people's trust, which is necessary to
 integrate citizens into the response to the emergency and its recovery. The ability to generate
 huge amounts of data about the virus is one thing; using that data to its true potential to inform
 the collective response is another. As one analyst put it, "In many ways, the pandemic has been a
 catalyst for removing barriers and encouraging collaboration even among competitors."
- Relevant data will make health systems more resilient and better able to respond immediately
 to the next crisis or even predict it before it happens. Interdisciplinary collaboration with open
 sharing of data across borders during a pandemic is more important than ever and can be used as
 a mean to ensure transparency and reliability.

Many public and state agencies manually collect, structure, and submit data, leading to incomplete and missing information, and thus to a loss of data integrity and the ability to predict and map infection surges.

2.1.2. INTEGRATING ARTIFICIAL INTELLIGENCE, PRIVACY, AND TRANSPARENCY IN PANDEMIC MANAGEMENT

The ongoing developments in artificial intelligence (AI) and machine learning (ML) have significantly improved treatment, medication, screening, prediction, forecasting, contact tracing, and drug/vaccine development during this pandemic. Al and ML have helped to predict length of hospitalization, likely outcomes of patients, relapse of symptoms, response to certain treatments, and other crucial considerations. Al has been used to understand

the spread of the disease and its features, allowing for the development of new therapies and vaccines.

Integration of geospatial and statistical information is now the subject of significant innovations. Integrating the analysis and visualization of geospatially enabled data boosts the possibilities of both policymakers and the public to discern and adapt to the conditions and needs of a given community. At the same time, it facilitates the combination of different sources of data, statistics, and information.¹¹

However, privacy and transparency of personal data is a key aspect of data management. When data is used to make decisions, it is vital that people are protected from

^{11.} United Nations, "The Sustainable Development Goals Report," 2020, https://unstats.un.org/sdgs/report/2020/.

potential harmful effects, such as profiling or exclusion. In order to protect people's health, governments and institutions have introduced restrictions on movement as well as mechanisms for tracing. These include contact-tracing and self-reporting apps, capable of recording and transmitting personal health information, a by-product that underscores the profound importance of data protection and privacy.

Governments and companies have had to balance the simultaneous protection of public health and personal privacy. Some measures designed to delay the spread of the virus and potentially save lives might have serious human rights implications. The emphasis has been on anonymization, minimization, purpose limitation, and data protection.

2.1.3. TIMELY DATA SHARING AND OPEN ACCESS IN THE ERA OF GLOBAL PANDEMICS

Responsible and timely data sharing should be mandatory in all types of health emergencies. Its reliability is crucial for the work of epidemiologists, researchers, health teams, funding agencies, private enterprises, and governments. Trust is essential for any interaction aimed at developing new medicines, therapies, vaccines, and strategies needed to deal with the unforeseen and countless demands of an unknown disease.

We have learned through Covid-19 that strong data systems, standards, and protocols for data sharing, despite geographical borders, are essential to a pandemic response. This crisis has taught us that these cannot be confined to emergencies or high-priority threats. There have been innovations to improve the use of relevant statistics. Nevertheless, one must emphasize the need to disseminate and use data more efficiently.

The sharing of data between people and organizations without previous relationships is possible if all adhere to important ethical principles on the use of data. Some obstacles include differences in the understanding of data ownership between providers and users. Barriers are also created by the lack of adequate rewards from investments in research and development (R&D). Nevertheless, there are examples of multilateral efforts to share data in health emergencies:

 In 2011, the WHO reached a global agreement on a framework for pandemic flu preparedness to facilitate the exchange of influenza virus samples and data, facilitate access to vaccines, and address issues relevant to low- and middle-income countries.

- In February 2016, when the WHO declared
 a Public Health Emergency of International
 Concern regarding a Zika virus-related cluster
 of microcephaly cases and other neurological
 disorders reported in Brazil, more than 30 global
 health organizations issued a joint statement in
 which they committed to sharing data to assure the
 global response to the Zika virus and future similar
 emergencies based on the best and most up-to-date
 evidence.
- In 2016, the Global Research Collaboration for Infectious Disease Preparedness launched a data-sharing working group that worked with the WHO, scientists, nongovernmental organizations, journals, and other agencies around the world to identify barriers to the sharing of data in public health emergencies. Unfortunately, there are limited incentives to share data for researchers, health staff, government officials, and others responsible for managing the emergency.

On the other hand, in a multilateral effort to promote open data, the WHO has introduced a Covid-19 Open, a data-sharing and reporting protocol to support early publication of virus research and quickly make related data available for widespread use, distribution, and reproduction. The United Nations Statistics Division supports national statistics agencies in learning from their experiences in

The pandemic has clearly shown the importance of reliable, comparable, timely, open and disaggregated data and statistics to tackle a crisis efficiently.



collecting data on the outbreak and cataloging the data they provide. 12

While the role of multilateral organizations in defining priorities, helping define approaches, and creating opportunities for cooperation is clear, local data cooperation and coordination are equally relevant. The introduction of digital contact-tracing apps and tools is a way for citizens to contribute their personal data and inform local Covid-19 responses. Even though research and data are abundant, multifaceted, and globally produced, there is no universally adopted system or standard for collecting, documenting, and disseminating Covid-19 research outputs. Therefore, "Research outputs should align with the FAIR principles, meaning that data, software, models, and other outputs should be Findable, Accessible, Interoperable and Reusable. A balance between achieving FAIR outputs and timely sharing is necessary with the key goal of immediate and open sharing as a driver."13

We have learned through
Covid-19 that strong data
systems, standards, and
protocols for data sharing,
despite geographical borders,
are essential to a pandemic
response.

2.1.4. THE IMPORTANCE OF GENOMIC SEQUENCING TO COVID-19 RESPONSE

Another important and relevant field of data sharing in the fight against Covid-19 is genomic sequencing. Information on specific viral strains is crucial. The surveillance of variants of concern must be a coordinated international effort to accelerate the identification of strains with new antigenic features or increased virulence. The rapid development of diagnostic tests and vaccines has been made possible by the advanced knowledge of SARS-CoV-2. Genomic sequencing must be combined with epidemiological and clinical data to provide accurate reports on new variants and their behavior, in particular considering that some vaccines are less effective against certain strains.

Last year, "SPHERES," a genomic sequencing initiative in the United States, was launched to improve coordination between institutions and jurisdictions. "The project will develop computational approaches for integrating community-based surveillance and contact tracing with phylogenetic and epidemic network analysis to identify transmission clusters in the country and abroad." ¹⁴

Although genomic surveillance is not simple, there is increasing awareness and knowledge about the need to develop techniques available to countries with a lower level of scientific development. Genomic surveillance practices should be standardized and become one of the common actions in public health that must be carried out to fight Covid-19. The resulting information must be shared among countries. Representative sequences from different regions require continuous monitoring of emerging strains of the virus, and no individual effort can achieve the required scale of sequencing. Moreover, genomic analysis of pandemic agents would benefit from data from different regions, which would require global cooperation.¹⁵

^{12.} Vasee Moorthy et al., "Data Sharing for Novel Coronavirus (COVID-19)," Bulletin of the World Health Organization 98, no. 3 (March 1, 2020): 150, https://doi.org/10.2471/BLT.20.251561.

^{13.} RDA COVID-19 Working Group, "RDA COVID-19 Recommendations and Guidelines on Data Sharing," June 30, 2020, https://doi.org/10.15497/rda00052.

^{14.} Centers for Disease Control and Prevention, "A National Open Genomics Consortium for the COVID-19 Response," April 9, 2021, https://www.cdc.gov/coronavirus/2019-ncov/covid-data/spheres. html.

^{15.} Institute for Stem Cell Science and Regenerative Medicine, "SARS-CoV-2 Genome Sequencing Effort," 2021, https://www.instem.res.in/content/sars-cov-2-genome-sequencing-effort-0.

Genomic sequencing must be combined with epidemiological and clinical data to provide accurate reports on new variants and their behavior, in particular considering that some vaccines are less effective against certain strains.

2.1.5. REGIONAL EFFORTS TO GATHER AND SHARE DATA

During a meeting last August of the executive committee of the Statistical Conference of the Americas (SCA), representatives of LAC countries stressed the importance of statistics to emphasize and make visible the vulnerabilities and major inequalities of the region. LAC countries issued a call to strengthen the role of national statistical offices to confront the challenges imposed by the coronavirus (Covid-19) pandemic.

In this context, a good example is CARICOM's Regional Strategy for the Development of Statistics and the group's efforts to improve statistics over the next 10 years. The Covid-19 crisis has created enormous amounts of digital data that governments can share and use, but it also underscores how fragmented and challenging decision-making can be. The criteria of relevance, no redundancy, content, and actionable become critical in giving greater sense and meaning to the ever-changing new data, especially in times of crisis and beyond.

2.2. Noncompliance with the IHR

The Covid-19 pandemic underscores long-standing challenges to meet all capacities required by the IHR. Strengthening and investing in health systems is a national and global priority for economic stability and security. Regional and global investment required to implement the IHR (2005) effectively in each country is no longer a minor public health issue. The IHR, as a global health security framework designed to "prevent, protect, control and provide a public health response to the international spread

of disease,"¹⁶ are one of the most cost-effective economic and financial policies of stability.

2.2.1. WHO'S WORK IN COVID-19: FINDINGS AND OPPORTUNITIES

The IHR Review Committee on the Functioning of International Health Regulations during the response to Covid-19¹⁷ has identified critical aspects and recommendations to improve IHR implementation:

- The lack of robust compliance evaluation and accountability or enforcement mechanisms reduces incentives for adequate preparedness and cooperation under the IHR and discourages timely notification of events and public health information.
- A robust accountability mechanism for evaluating and improving compliance with IHR obligations would strengthen preparedness, international cooperation, and timely notifications of public health events.
- Early response requires better collaboration, coordination and trust. The WHO should be empowered to collaborate to offer immediate technical support in outbreak investigations and risk assessment; if such offers are not accepted by states parties, they should promptly explain their position. In addition, the WHO should share its risk assessments publicly and should develop a mechanism allowing open sharing of information about events under review.

^{16.} World Health Organization, "International Health Regulations (2005) Third Edition," January 1, 2016. https://www.who.int/publications/i/item/9789241580496

^{17.} World Health Organization, "Strengthening Preparedness."



Strengthening and investing in health systems is a national and global priority for economic stability and security.

- Applying the precautionary principle in implementing travel-related measures would enable early action against an emerging pathogen with pandemic potential. The focus should be on protecting health, sharing essential information and specimens, and accepting that travel and trade restrictions may be required.
- The importance of timely notification and outbreak alert mechanisms under the IHR needs to be further evaluated. The WHO needs flexibility and agility to rapidly provide information about public events with the risk of international spread. "The limited authority and status of the national IHR focal points often leads to delays in notification. Another consideration is that countries may be reluctant to report on events if they perceive consequences, mainly related to travel and trade, deriving from early notification."
- The IHR Review Committee evaluated the advantages and disadvantages of an intermediate level of alert, such as a "yellow phase" as an initial warning signal. The committee concluded that introducing a formal intermediate level of alert would not solve the current problem of lack of action on WHO advice and recommendations. Better risk assessments are essential, tailored regionally and with clear recommendations concerning readiness and response actions.

Member states at the World Health Assembly in May 2020 also requested the WHO establish an **Independent Panel on Pandemic Preparedness and Response** to carry out an impartial, independent, and comprehensive evaluation of the WHO-coordinated international health response to Covid-19. In its final report to the May 2021 session 7

of the World Health Assembly,¹⁸ the panel identified the following issues on IHR:

- Establish a new international system for surveillance, validation and alert. The procedures and protocols of the IHR, including those that led to the declaration of a public health emergency of international concern, must be adapted to the current digital age, building an information system that is fed in real time by local health personnel in clinics and laboratories to respond more quickly to health risk events. "This technical updating must be accompanied by a political step-change in the willingness of countries to hold themselves accountable for taking all necessary actions as soon as an alert is issued."
- The WHO has limited capacity to validate reports
 of disease outbreaks in response to their pandemic
 potential and thus to issue containment measures.
 "The incentives for cooperation are too weak to
 ensure the effective engagement of States with the
 international system in a disciplined, transparent,
 accountable and timely manner."
- The bias of the current system of pandemic alert is toward inaction – steps may be taken only if the weight of evidence requires them. This bias should be reversed; precautionary action should be taken on a presumptive basis unless evidence shows it is not necessary.
- The panel has highlighted the need to implement more forceful containment measures by local and national authorities in the early stages of a health

^{18.} Independent Panel for Pandemic Preparedness and Response, "COVID-19: Make It the Last Pandemic," May 12, 2021, https://theindependentpanel.org/wp-content/uploads/2021/05/COVID-19-Make-it-the-Last-Pandemic_final.pdf.

KEY MESSAGES - 2.2. NONCOMPLIANCE WITH THE IHR

- The IHR are widely recognized as a robust instrument for addressing health threats. However, the
 inadequate efforts to achieve the IHR's core capabilities and the lack of enforcement mechanisms
 and accountability, including the inclusion of positive incentives and sanctions, have limited its
 effectiveness in combating the spread of Covid-19.
- The IHR are the pillar of global and regional health security and the road map for countries
 to cooperate and coordinate measures to monitor and respond to public health risks and
 emergencies. As noted by the IHR Review Committee on the Functioning of International Health
 Regulations in response to Covid-19,¹ the purpose of this architecture is to enable the prevention,
 detection, and containment of health risks and threats, strengthening national capacities for this
 purpose and coordination of a global alert and response system.
- Although PAHO has provided direct technical assistance to national health authorities through regional and country incident management teams, including evidence-based technical documents to guide countries' strategies and policies and intensify their readiness and response operations, there was failure to apply coordination mechanisms described f in the IHR.
- The lessons learned from the Covid-19 pandemic have led to a new discussion about the need to strengthen global health security through a WHO convention or agreement or other international agreement to improve systems that alert the world to a pandemic, including sustained, predictable funding for preparedness and response to health emergencies, and governance and oversight mechanisms to increase trust, ensure accountability, and promote transparency.
- A new era of international cooperation is needed to better support the implementation of IHR.² The Covid-19 pandemic has shown that much stronger and better coordinated global action is needed to improve preparedness and response. Important issues not specifically mentioned in the IHR include rapid sharing of genetic information and samples of pathogens of concern, with recipients having adequate access to benefit from the information; research coordination; development of and equitable access to medical countermeasures and other innovations developed during emergencies; ensuring a global workforce to support rapid response; ensuring a global supply chain for health emergencies; and fostering a One Health approach to address the risks of emergence and transmission of zoonotic diseases.
- These issues require greater political will, international and regional cooperation among all relevant stakeholders and across sectors and aligned actions to achieve shared goals.

^{1.} World Health Organization, "Strengthening Preparedness for Health Emergencies; Implementation of International Health Regulations (IHR, 2005)," May 5, 2021, https://apps.who.int/gb/ebwha/pdf_files/WHA74/A74_9Add1-en.pdf.

^{2.} Steve Thomas et al., "Strengthening Health Systems Resilience: Key Concepts and Strategies" (European Observatory on Health Systems and Policies, 2020), https://www.euro.who.int/en/about-us/partners/observatory-old/publications/policy-briefs-and-summaries/strengthening-health-systems-resilience-key-concepts-and-strategies-2020.



emergency to alert its potential global concern. The earliest evidence of the success of the measures against SARS-CoV-2 could have been shared more widely and proactively, and actions should have been taken more quickly to implement the most successful containment measures in all areas where cases appeared.

2.2.2. LACK OF INVESTMENT IN IHR IN THE AMERICAS REGION

Experts consider the deadlines for the full implementation of the IHR to be an obstacle to the implementation of the agreement worldwide. In 2018, the WHO launched a formal global consultation process to revise the implementation of the IHR. For all 13 core capacities, the average scores in the Americas were close to or above 60 percent, with the lowest average scores (54 percent) for radiation emergencies and the highest average score (76 percent) for IHR coordination and national focal point functions. However, the status of regional core capacities was highly heterogeneous. The highest average subregional scores for all 13 core capacities were in North America, while the lowest average scores were registered in the Caribbean for eight core capacities (legislation and financing, zoonotic events and the human-animal interface, surveillance, human resources, risk communication, points of entry, chemical events, and radiation emergencies); in Central America for four core capacities (IHR coordination and National IHR Focal Point functions, food safety, National Health Emergency Framework, and health service provision); and in South America for one core capacity (laboratory).19

Nevertheless, even in countries where the core capacities of the IHR are strong, the response to Covid-19 was inadequate, as was the case in the United States and some European countries. There is a need for global solidarity and international support to strengthen all national health systems. One country's weak health care system is a threat to all countries. The time has come to consider more effective financial and technical mechanisms to help low-income countries build and maintain IHR core capacities, as this is in the interest of global security.

2.2.3. A POTENTIAL FRAMEWORK CONVENTION FOR PANDEMIC PREPAREDNESS AND RESPONSE

The effects of international treaties, their causal pathways, and the conditions under which these pathways function is currently among the most heavily debated issues and contested puzzles in the fields of international law and international relations.²⁰

The Covid-19 pandemic has spurred a growing interest in the possibility of a new international treaty for preparing and responding to global pandemics. In this respect, the WHO Director- General Tedros Adhanom Ghebreyesus has signaled that a new treaty should not replace the IHR. The aim of a treaty should be to give political force to the implementation of the IHR and to build a stronger global institutional structure to prevent and respond to future pandemic threats.

A framework convention could also provide an opportunity to address outstanding issues related to enforcement mechanisms for the obligations of IHR states parties, including the promotion of compliance through an

There is a need for global solidarity and international support to strengthen all national health systems.

^{19.} Pan American Health Organization and World Health Organization, "Implementation of the International Health Regulations (IHR)," July 23, 2019, https://iris.paho.org/bitstream/handle/10665.2/51629/CD57-INF-4-e.pdf?sequence=1&isAllowed=y.

^{20.} Steven J. Hoffman and John-Arne Røttingen, "Assessing the Expected Impact of Global Health Treaties: Evidence From 90 Quantitative Evaluations," American Journal of Public Health 105, no. 1 (November 13, 2014): 26–40, https://doi.org/10.2105/AJPH.2014.302085.

effective dispute settlement mechanism. However, as Steven J. Hoffman, Professor of Global Health, Law and Political Science, York University, has noted, "a dispute resolution is not entirely absent in the IHR. Governed by Article 56 of its provisions, two types of disputes are recognized with different processes for resolution. For disagreements between states, the parties 'shall seek in the first instance to settle the dispute through negotiation or any peaceful means of their own choice, including offices, mediation or conciliation.' If a resolution is not attained, the parties 'may agree to refer the dispute to the WHO Director-General, who shall make every effort to settle it.' Binding arbitration is then possible if the dispute is among states that have voluntary accepted it 'as compulsory with regard to all disputes concerning the interpretation or application of these Regulations."21

Hoffman stresses that "while the parties may be legally required to attempt settling the dispute, there is no guarantee or requirement that they actually resolve it. Negotiation and conciliation are strictly voluntary, as is mediation with the [WHO] Director-General. This lack of any obligatory mechanism compelling the disputing parties to participate means that it will be power and political influence, rather than law and legal norms, that determine the resolution process and outcome."²²

In summary, there is clear and overwhelming support for the IHR and the need to strengthen them. Support for reinforcing the current legally binding technical IHR framework is part of the current discussion at the WHO. Countries in the region of the Americas have the opportunity to engage in this discussion and coordinate it through the Member States Working Group on Strengthening WHO Preparedness and Response to Health Emergencies, which, among other things, must establish a priority in assessing the benefits of developing a WHO convention, or agreement, or other international instrument on pandemics. The working group will submit a report to the special session of the World Health Assembly in

November 2021, with a view toward an intergovernmental process to draft and negotiate such an instrument.

The political will to engage in and support the process of negotiation, adoption, ratification, and domestic implementation of additional health treaties on pandemics is still fragile, as Russia and the United States are not on board with the idea of a new legal instrument. There are also concerns that a new pandemic treaty will further weaken the fulfillment of IHR core capacities, where many consider the focus should lie. Political will and leadership will always be crucial to ensuring the effectiveness of any of the instruments and initiatives that emerge as part of the remedies after Covid-19.

2.3. Lack of Equitable Access to Health Products and Services in the Time of Covid-19

During the Covid-19 pandemic, the world is facing unprecedented challenges in accessing medicines and other health products. Drug shortages; hoarding of and unequal global access to drugs, vaccines, and supplies; and the circulation of substandard and falsified health products have already exacerbated this once-in-a-century global health challenge, with devastating consequences for the Americas region.²³

2.3.1. SHORTAGES OF MEDICAL SUPPLIES

In the initial phase of the response, attention was focused on Personal Protective Equipment (PPE). Shortages have extended to other products such as testing supplies, dialysis materials, pharmaceuticals, and a variety of indispensable commodities for the daily care of patients with and without Covid-19. PPE shortages received special attention because health care personnel are more exposed. But all product shortages threaten patients due to delays, rationing or denial of care, use of substandard products or a higher risk of error in replacement products - risks that lead to increased mortality. The shortage of

^{21.} Steven J. Hoffman, "Making the International Health Regulations Matter," in Routledge Handbook of Global Health Security, ed. Simon Rushton and Jeremy Youde (New York: Routledge Handbooks Online, 2014), 241, https://www.routledgehandbooks.com/doi/10.4324/9780203078563.ch20.

^{22.} Steven J. Hoffman, "Making the International Health Regulations Matter," in Routledge Handbooks of Global Health Security, 242, https://www.routledgehandbooks.com/doi/10.4324/9780203078563.ch20.

^{23.} Jillian C. Kohler and Tim K. Mackey, "Why the COVID-19 Pandemic Should Be a Call for Action to Advance Equitable Access to Medicines," BMC Medicine 18, no. 1 (December 2020): 193, https://doi.org/10.1186/s12916-020-01661-3.



KEY MESSAGES - 2.3 LACK OF EQUITABLE ACCESS TO HEALTH PRODUCTS AND SERVICES IN THE TIME OF COVID-19

- The Covid-19 pandemic has deepened the existing vulnerability of the medical product supply chain. The spread of the novel disease has been accompanied by global shortages of critical medical products, high prices, unfair competition, and export hans
- The drastic increase in the demand for critical medical goods during Covid-19 and the disruption of the supply chain for
 medical products means the world in particular, developing regions is susceptible to substandard and falsified medical
 products. No country wins in the Covid-19 supply bid, but these factors further threaten access to the safety and quality of
 Covid-19 vaccines, with serious disadvantages and risks for low- and middle-income countries.
- The underlying causes of supply chain vulnerability are not specifically linked to the pandemic. In general, access has
 been limited and exposed to the intrinsic, for-profit bottom line of financial and trading rules that threaten equal access
 to Covid-19 tools at global and regional levels. In addition, national economic and regulatory policies, including lack of
 incentives, have led to restrictions on generic competition, the discontinuation of less profitable medical product lines, and
 product supply chains expanding into complex global manufacturing and transport networks.
- While developing Covid-19 vaccines in less than 12 months is a milestone, it has also highlighted the challenge of expanding production capacity to promote the widespread introduction and efficient distribution of successful vaccines. Low- and middle-income countries account for about 85 percent of the world's population and may lack the resources to buy adequate quantities of vaccines. Scaling production to meet global demand and facilitating mechanisms to ensure affordability and sustainable financing of Covid-19 vaccines in low- and middle-income countries is a monumental challenge to end the pandemic. ¹
- While most countries have created special commissions to negotiate the purchase of Covid-19 vaccines with the
 laboratories, the limited capacity to negotiate has affected the introduction, allocation, and efficient distribution
 in the Americas region, particularly in some LAC countries. Unfortunately, the lack of transparency has created a
 potential risk of corruption, which has threatened vital public health goals in some countries of the region.
- The tendencies toward unilateral initiatives and deals have fragmented investment in global solutions. Despite the call for global access to Covid-19 vaccines, the situation is driven by vaccine nationalism, the concentration of supplies, and insufficient production, leaving a large part of the world without access to vaccines until 2024. Consequently, multilateral commitments, advance purchase agreements between pharmaceutical companies and some developed countries, the proposed mechanisms for voluntary licensing of technologies, and COVAX lack the necessary political support to close the growing inequalities in the access to Covid-19 vaccines.
- Although the WHO issued guidance to help countries identify essential services that should be prioritized to maintain continuity of service delivery during the Covid-19 pandemic, both global and regional health services have been interrupted and limited by increasing demand for health systems associated with Covid-19. But limited response and management capacities for the first level of care, added to the segmentation and fragmentation of health systems and services, are persistent challenges that remain unresolved in many countries in the Americas region. This fact has impaired the ability of health authorities to create a country-specific list of essential services, identify routine and elective services that can be delayed in relocating to non-affected areas, and draw up a road map for progressive reduction of services recommended by the WHO.²

^{1.} Olivier J. Wouters et al., "Challenges in Ensuring Global Access to COVID-19 Vaccines: Production, Affordability, Allocation, and Deployment," Lancet 397, no. 10278 (March 13, 2021): 1023–34, https://doi.org/10.1016/S0140-6736(21)00306-8.

^{2.} World Health Organization, "COVID-19: Operational Guidance for Maintaining Essential Health Services during an Outbreak," March 25, 2020, https://apps.who.int/iris/bitstream/handle/10665/331561/WHO-2019-nCoV-essential_health_services-2020.1-eng.pdf?sequence=1&isAllowed=y.

medical products threatens the ability to meet health criteria that ensure that patients receive adequate care.²⁴

The shortage of medical products has been addressed and understood to a certain degree. Global drug supply chains are often vulnerable to shortages. The capacity to manufacture medical products is also impacted by shortages of inputs – raw materials or component parts. Input shortages may be a consequence of tightly coupled production arrangements and insufficient substitutes that limit their wide availability. Availability of medical products during Covid-19 has been also impacted by restrictions on international transport capacity and the introduction of border and export restrictions, as countries prioritized domestic needs.

2.3.2. ACCESS TO HEALTH PRODUCTS IN THE TIME OF COVID-19: BUSINESS AS USUAL

Covid-19 has revealed historical inequalities in the access to essential medicines and other health products, including vaccines. Access to Covid-19 vaccines, treatments, and diagnostics has been enormously inequitable. Wealthy nations have pushed ahead in the fight for vaccines, but the progress made by these nations will remain in jeopardy as long as Covid-19 thrives in other parts of the world. The global economy will lose up to US\$9 trillion if governments fail to ensure developing economies' access to Covid-19 vaccines. Inequitable access to Covid-19 tools elsewhere in high-income countries would cost an additional US\$2.4 trillion in 2021 alone, even with strong Covid-19 vaccine coverage in these countries, as a study commissioned by the International Chamber of Commerce in January 2021 showed.²⁵

Despite the enormous financial support of governments in Covid-19 R&D - mainly in the United States, the United Kingdom, and other European countries, as well as China and Russia – there are outstanding issues of transparency in terms of scientific methods and data, clinical trial costs, and set performance targets for vaccines.

Likewise, there is a continuing debate on seizing the flexibilities included in the Agreement on Trade-Related

Aspects of Intellectual Property Rights (TRIPS Agreement) to facilitate access to medicines during a public health emergency. On the one hand, for states that host large pharmaceutical companies, the TRIPS Agreement acknowledges that intellectual property is a driver of innovation. On the other hand, States with sizeable generic drug industries argue that the TRIPS Agreement contains flexibilities that governments can use to speed up access to Covid-19 vaccines and treatments. Ultimately, many countries with low or no local production capacity, such as middle-income countries in the Americas region, are also tied to bilateral trade agreements that render the flexibilities under the TRIPS agreement ineffectual - for example, by establishing new forms of IP protection, such as data exclusivity - and provisions that restrict the government's ability to intervene when a license is compulsory.

On October 2, 2020, India and South Africa made public a request to waive certain provisions of the TRIPS Agreement for the prevention, containment, and treatment of Covid-19. The proposal was updated at the meetings of the TRIPS Council and the World Trade Organization (WTO) General Council, and WTO members agreed to engage in text-based discussions. The discussion requires significant compromise to strike a balance while considering other elements necessary for a comprehensive response to the pandemic, including tariffs and export restrictions, trade facilitation, and the role that the WTO can play as a matchmaker between vaccine developers and manufacturers. ²⁶

Certainly, it has been a disruptive proposal among WTO member states: 62 countries around the world have expressed support, and the United States announced on May 5, 2021, that it would support and be willing to actively participate in text-based discussions on a temporary waiver of intellectual property rights in relation to vaccines and medical products against Covid-19. By contrast, the European Union, South Korea, Switzerland, and the United Kingdom have expressed opposition to the proposal, insisting that IP protection is a source of innovation, and that voluntary licenses are the most effective tool to facilitate the expansion of production and the sharing of know-how. The European Union has therefore also submitted a proposal on urgent trade policy responses to the pandemic, which also will be discussed by WTO members. Brussels argues that manufacturing

^{24.} Fiona A. Miller et al., "Vulnerability of the Medical Product Supply Chain: The Wake-up Call of COVID-19," BMJ Quality & Safety 30, no. 4 (April 1, 2021): 331–35, https://doi.org/10.1136/bmjqs-2020-012133.

^{25.} World Health Organization, "ACT-A Prioritized Strategy and Budget for 2021," April 12, 2021, https://www.who.int/publications/m/item/act-a-prioritized-strategy-and-budget-for-2021.

^{26.} World Trade Organization, "Members approach text-based discussions for an urgent IP response to COVID-19," June 9, 2021, https://www.wto.org/english/news_e/news21_e/trip_09jun21_e.htm



I think one of the biggest tragedies is that this was a problem we knew about, and we just marched along and now we see it and we're facing all the consequences. One hundred percent avoidable, I think, when thinking about them on a more forward basis, thinking constructively.

Steven Hoffman, Member, Inter-American Health Task Force First Virtual Meeting, March 2, 2021

can be done at cost and that patent holders should receive only a minimal remuneration that does not entail any benefits. The EU believes this is the fastest way to increase global production and accelerate vaccination campaigns in countries with fewer resources.

Apart from this discussion, several IP issues around Covid-19 vaccines need to be addressed. Some of the main platform technologies that had been used in the development of other vaccines and that were leveraged to develop Covid-19 vaccines remain under patent control. Hundreds of patents on mRNA technology, an alternative to traditional vaccine platforms owned by different companies, are IP protected. One of the companies decided during the pandemic not to enforce its patents on mRNA vaccine technology, but voluntary measures may not be sufficient to provide legal certainty to all competent developers and manufacturers.

With ongoing R&D, new innovations could be sought for Covid-19 vaccine products, manufacturing processes, methods of use, and related technologies, such as the cold chain management system for vaccine storage. The discussion around IP protection requires an allencompassing solution that addresses not only patent barriers to vaccines, but also related technologies and equipment.²⁷

2.3.3. ACCESS GAPS THREATEN THE REGIONAL FIGHT AGAINST COVID-19

Access to vaccines, therapeutics, and medications remains the biggest challenge in the Americas. Vaccines are not the only scarce resource in 2021. As cases have risen, some countries have faced shortages of supplies that are indispensable to protecting the health workforce and treating cases. In the first months of the year, the availability of oxygen and anesthetic drugs has been threatened by the speed of new cases saturating hospitals in Brazil, Peru, and other countries. The struggle to access supplies and medicines is overburdening regional health systems, even in some countries that have a strong supply chain. PAHO has focused on accelerating the procurement of drugs and PPE needed on the front lines.

At the same time, the region is an example of the inequalities in access to Covid-19 vaccines. The vaccines are arriving in Latin America and the Caribbean but at a very slow rate compared to North America. Canada, for example, bought the most shots, given the size of its population, with enough doses to vaccinate every Canadian several times. Countries have actively worked to secure vaccines through bilateral and multilateral arrangements (COVAX), including agreements with Pfizer, Moderna, AstraZeneca, Russia's Sputnik V, and China's Sinovac. Cuba and Brazil are leading the way in creating their own vaccines, while Mexico and Argentina have joined forces to produce vaccines to meet regional demand. They are expected to produce between 150 million and 250 million doses of AstraZeneca and the University of Oxford's adenovirus-based vaccine, starting in the first half of 2021.

^{27.} Access Campaign: Médecins Sans Frontières, "WTO COVID-19 TRIPS Waiver Proposal: Myths, Realities and an Opportunity for Governments to Protect Access to Medical Tools in a Pandemic," December 3, 2020, https://msfaccess.org/sites/default/files/2020-12/COVID_TechBrief_MSF_AC_IP_TRIPSWaiverMythsRealities_ENG_Dec2020.pdf.

Notably, Covid-19 vaccines are redrawing the geopolitical map in the region. Through donations of vaccines, medical supplies, and Ioans, China, Russia, and India are rapidly becoming partners of choice in Latin America's Covid-19 recovery. Meanwhile, the US administration has announced it will donate 580 million doses of Covid-19 vaccines worldwide over the next two years. As of July 23, 2021 the US had donated more than 30 million doses to LAC countries.

Regrettably, nationalism, unilateralism, manufacturing restrictions on the supply of Covid-19 vaccines are also undermining regional solutions. The capacity of PAHO's Revolving Fund for Access to Vaccines to supply and distribute Covid-19 tools has been affected by these adverse patterns. For more than 40 years, the PAHO Revolving Fund has helped countries in the Americas to vaccinate their populations against infectious diseases such as polio, measles, yellow fever, bacterial pneumonia, influenza, and human papilloma virus. The Revolving Fund allows nations to pool their resources to purchase vaccines, syringes, and related supplies at a lower cost.

The unequal access to Covid-19 vaccines also reconfigures the global recovery map, amplifying the gaps between developed and developing countries. Measures planned by wealthy countries, such as the Digital Green Certificate or "vaccine passport," may lead to increased mobility restrictions between and within countries. The map also shows that a long and lethargic recovery is expected in most low- and middle-income economies in the Americas, as successful vaccination campaigns are essential to control the pandemic everywhere. Yet this has not led to

the coordinated effort needed for an adequate and fair vaccine delivery in the region.

In the meantime, the support of WHO-PAHO and international financial institutions (the World Bank and the Inter-American Development Bank) has been catalytic in some countries in the region, especially in Latin America and the Caribbean, in strengthening preparedness and deployment of vaccines by providing support on norms, guidance and policies, capacity building, technical assistance and cold chain equipment, as well as domestic funding for national immunization programs.

Finally, strengthening the R&D agenda, product evaluation, and regulatory pathways for new and modified tests, treatments, and vaccines to respond to emerging variants and programmatic needs is critical to preparing the world and the region for a scenario where some existing solutions may no longer be fully adequate. To accomplish this, it may be necessary to modify tools or develop new ones to combat these variants. In addition, the region faces considerable programmatic challenges (for example, the need for ultra-cold chains or multiple doses of vaccines) in the delivery of some Covid-19 tools, which could be overcome in the future through product optimization. These aspects underline the need for sustained, strengthened, and focused R&D efforts and rapid regulatory processes.²⁸ All this needs concrete political actions aimed at ensuring equal access.

In difficult choices about vaccine allocation, the principle of equal regard directs attention to the equal worth and value of every person, protecting each one from discrimination, while the principle of fairness requires impartiality and the engagement and participation of affected populations in setting allocation criteria and determining priority groups.

Helene Gayle, Co-chair, Inter-American Health Task Force, First Virtual Meeting, March 2, 2021

^{28.} World Health Organization, "ACT-A Prioritized Strategy."



2.3.4. COLLATERAL EFFECTS OF COVID-19 IN ACCESS TO HEALTH CARE AND SOCIAL CARE

Covid-19 has compromised routine health care across the world. A large number of patients are not receiving the same standard of care that they had access to before the pandemic. This is concerning as many successful health outcomes (e.g. vaccination programs and oncology diagnoses) are at risk of suffering a setback. Hospitals and health facilities have noted that a high number of patients with chronic health conditions (noncommunicable diseases, or NCDs) such as diabetes, cardiovascular disease, and cancer, are refraining from receiving health services.

The current discourse has focused on the direct health consequences of the virus and its socioeconomic consequences. The resources of the health system are disproportionally allocated to Covid-19 patients, with indirect costs for non-Covid patients who may struggle to access the care they need. Unmet health care needs reflect a discrepancy between the needs perceived by patients seeking health care and the actual health care services received, making it a measure of access to care. For example, the lack of access to care in Canada is often linked to a high number of unattended patients (those with no regular family doctor or other primary care providers).

To what extent will we look at the tsunami of NCDs that will come after the pandemic? All the data show there is a late detection and mismanagement of communicable diseases and chronic diseases.

Felicia Marie Knaul, Member, Inter-American Health Task Force, First Virtual Meeting, March 2, 2021 About 15 percent of Canadians are in this situation. Even worse, in Québec, the province hardest hit by Covid-19, nearly 22 percent do not have a regular provider.²⁹

In addition, the severity of the confinement measures adopted to mitigate Covid-19 has exacerbated other social and health conditions in the region. There has been a significant increase in the number of women and girls experiencing domestic violence. Likewise, one of the most prominent effects of the pandemic has been the emergence of mental health disorders, as well as the disruption of mental health services.

Another source of concern is the suspension or limitation of reproductive, maternal, neonatal, and child health (RMNCH) services. A report commissioned by the UN Development Program and UNICEF (UN Children's Fund) estimates that a 10 percent decrease in essential maternal and child services as a consequence of the pandemic could cause 28,000 maternal and 168,000 neonatal additional deaths per year in low- and middle-income countries, including 34 countries and territories in Latin America and the Caribbean.

Similarly, the pandemic has impacted screening, diagnosis, treatment, and follow-up for breast and cervical cancer. For patients with breast or cervical cancer and those who are at high risk for those diseases, Covid-19 presents a unique challenge, as delays in treatment and consultations allow time for tumor progression and metastasis. Disruptions caused by Covid-19 have significantly impacted almost all aspects of cancer control and prevention, including canceled cancer screening services, deferred elective surgery, and dismantled therapeutic treatments. Cancer screening is one of the most impacted services for cancer control and prevention. Data analysis also shows that if colorectal cancer screening rates in people between 50 and 70 years of age improved to 80 percent, the number of deaths avoided would be threefold, and the costs would be reduced by one-third.30

However, accurately measuring the collateral damage to health care needs in the short and long run is complex; the damage might never be fully assessed. Surely the

^{29.} Mehdi Ammi, "Collateral Damage: The Unmet Health-Care Needs of Non-COVID-19 Patients," The Conversation, October 26, 2020, http://theconversation.com/collateral-damage-the-unmet-health-care-needs-of-non-covid-19-patients-145934.

^{30.} Ramon S. Cancino et al., "The Impact of COVID-19 on Cancer Screening: Challenges and Opportunities," JMIR Cancer 6, no. 2 (October 29, 2020), https://doi.org/10.2196/21697.

Covid-19 pandemic will have a long-term impact on health systems that should be addressed as quickly as possible by political and health authorities.

2.4. Misinformation, Disinformation, Conspiracy Theories: A War Against Multiple Forces

It is unquestionable that Covid-19 found governments, as well as health organizations and services, almost unprepared to face such an aggressive pandemic.

Nevertheless, it would be too shortsighted and simplistic to simply blame unpreparedness for the tragedy of losing so many lives in such a short time. Some populist heads of state have contributed with their actions by deliberately refusing to listen to the scientific community and suggesting that the virus could be deterred.

In June 2020, the WHO held its first ever conference on "infodemiology" in response to misinformation about Covid-19. It was then that the term "infodemic" was coined to categorize some of the common features of rumors, stigma, and conspiracy theories that in public health emergencies are defined as "overabundance of information," some accurate and some not, making it difficult for people to find trustworthy sources and reliable advice when they need it.

The UN Secretary General António Guterres identified Covid-19–related rumors as a global enemy, to the point that the UN, along with the WHO and other international organizations, issued a joint declaration calling on countries to "develop and apply action plans in order to manage the 'infodemic' by promoting the timely dissemination of accurate information based on scientific and evidentiary data, aimed at all communities, and particularly at high-risk groups; and preventing and combating the spread of erroneous and false information, always respecting freedom of expression."³¹

Indeed, technology has changed the way we create, access, share, and digest information on a global scale. More than four billion people worldwide, including about 770 million people in the Americas, now use the Internet. Facebook, Twitter, YouTube, and online newspapers have been identified as the best platforms to monitor misinformation and dispel rumors, stigma, and conspiracy theories among the general population. Two astonishing examples of how misinformation pervaded news and became notorious were the intake of food and vitamins to boost immunity and so-called "treatments" such as miracle mineral solutions in which sodium chloride solution was mixed with citric acid or bleach or alcohol for immunity and cures.

The New York City Department of Health said it was experiencing an increase in Lysol and bleach exposure after President Donald Trump talked about the prospect of using disinfectants as an internal treatment for the coronavirus in April 2020. Maryland issued an emergency alert after receiving more than a hundred calls for disinfectants consumption as a possible treatment for Covid-19, according to the governor's office. Misinformation and disinformation (MDI) is an old problem in a new context. A Brazilian study found that, during the outbreak of Zika in 2015 and the prevalence of yellow fever in 2016, misconceptions about the transmission of viruses and their side effects were widely spread.³²

The spread of misinformation during an epidemic can fuel public paranoia and panic and hamper efforts to contain it. Those who may benefit from spreading misinformation will increasingly draw on AI to create more sophisticated ways to spread their messages. Thus, trust plays a crucial role in digital information ecosystems. Understanding the role of trust and how individuals and institutions can gain or retain it is crucial to combating the threat posed by MDI.

Print, radio, and television news outlets, as well as the Centers for Disease Control and Prevention (CDC), the WHO, PAHO, national health organizations, and some agencies, are consistently posting guidance across a host of platforms because misinformation about Covid-19 comes in many different forms from multiple sources and makes all types of untruthful claims.

^{31.} World Health Organization, "Managing the COVID-19 Infodemic: Promoting Healthy Behaviours and Mitigating the Harm from Misinformation and Disinformation," September 23, 2020, https://www.who.int/news/item/23-09-2020-managing-the-covid-19-infodemic-promoting-healthy-behaviours-and-mitigating-the-harm-from-misinformation-and-disinformation.

^{32.} John M. Carey et al., "The Effects of Corrective Information about Disease Epidemics and Outbreaks: Evidence from Zika and Yellow Fever in Brazil," Science Advances 6, no. 5 (January 2020), eaaw7449, https://doi.org/10.1126/sciadv.aaw7449.



KEY MESSAGES - 2.4 MISINFORMATION, DISINFORMATION, CONSPIRACY THEORIES: A WAR AGAINST MULTIPLE FRONTS

- Fake news, social media, rumors, stigmas, and conspiracy theories have spread widely and
 indiscriminately contradicted or dismissed the warnings and advice of the scientific community.
 Currently, there is a social media fight against vaccination, not based on evidence, but for political
 or commercial reasons.
- The need for trustworthy information has never been greater and more urgent than during this pandemic. Millions of people around the world are looking for reliable, fact-based, and gender-sensitive journalism that can help them navigate the biggest shared challenge of our lifetime. One of the key pillars needed to slow the spread of Covid-19, mitigate its effects, and underpin collective social responses is to be able to count on reliable sources of information. In the event of a global health crisis, it is imperative to work with responsible journals and journalists, as they represent the best antidote to the misinformation fueling the pandemic. In addition to the role of the media, governments have the responsibility to provide clear, consistent, and credible communications.
- People living in quarantine, isolation, or at risk of an infectious disease outbreak are likely
 to experience psychosocial stress and adverse health outcomes, which may increase their
 interest in learning more about the disease. Under these strenuous circumstances people, tend
 to accept misleading information that travels through social media as truthful. The spread of
 misinformation masks healthy behaviors and promotes wrong practices that increase the spread
 of the virus and ultimately lead to poor physical and mental health outcomes in individuals.

Prominent public figures continue to play an outsized role in disseminating misinformation about Covid-19. This is the case of President Jair Bolsonaro. In March 2020 Twitter, Facebook, and YouTube decided to remove some of his posts. "Despite all evidence, a strong rhetoric undermining risks associated to Covid-19 has been endorsed at the highest levels of the Brazilian government, making President Jair Bolsonaro the leader of the 'coronavirus-denial movement." 33

There is still another gruesome difficulty to deal with: the spread of conspiracy theories. Since the outbreak of Covid-19 began, they have spread in several countries, and some have spread around the globe. One of these

theories suggests Covid-19 was a bioweapon that was engineered by international organizations. It is also argued that several countries manufactured and spread the deadly coronavirus. Other theories circulating on social media state that this pandemic is a population control system and that the Covid-2019 outbreak was planned.

2.4.1. COORDINATION AND COOPERATION ARE ESSENTIAL TO DEAL WITH DISINFORMATION

The impact of information overload and the rest of social media are critical issues, as is the impact of late, confusing, partisan, or conflicting messaging in undermining citizens' trust. ³⁴

^{33.} Julie Ricard and Juliano Medeiros, "Using Misinformation as a Political Weapon: COVID-19 and Bolsonaro in Brazil," Harvard Kennedy School Misinformation Review 1, no. 2 (2020): 1–6, https://doi.org/10.37016/mr-2020-013.

^{34.} The Independent Panel for Pandemic Preparedness and Response, "The 4th Meeting of the Independent Panel," The Independent Panel for Pandemic Preparedness and Response, February 9, 2021, https://theindependentpanel.org/event/the-4th-meeting-of-the-independentpanel/.

The spread of Covid-19 disinformation is a complex issue that requires cooperation, coordination, and trust among online platforms, governments, and national and international health organizations. Tackling misinformation and disinformation will require different strategies. The integration of social media as an essential tool in preparedness, response, and recovery to Covid-19 and future public health threats is fundamental. For example, Google, Facebook, Twitter, YouTube, LinkedIn, Microsoft, and Reddit have published a joint statement on their cooperation with government health care agencies to combat fraud and disinformation about Covid-19.

Several responses are already underway, but more can be done. Support for independent fact-checking organizations that are able to perform unbiased analysis of information, while helping online platforms identify misleading and false content can be extremely useful. 35 Governments and international authorities can help by supporting their analyses and relying on them to restore public trust. There are three main types of collaborative efforts between platforms and public health authorities in the Americas and worldwide:

- Cooperating with fact-checkers and health authorities to flag and remove disinformation.
 Facebook cooperates with third-party fact-checkers to debunk false rumors about Covid-19, label this content as false, and inform people trying to share such content that it has been verified as false.
- Highlighting, surfacing, and prioritizing content from authoritative sources. Platforms such as Facebook, Instagram, TikTok, and Pinterest are redirecting users to information from the WHO in response

to searches for information on and hashtags associated with Covid-19.

Offering free advertising to authorities. Facebook,
 Twitter, and Google have granted free advertising
 credits to the WHO and national health authorities to
 help them disseminate critical information regarding
 Covid-19. Social media platforms could do more
 to identify sources of misinformation to promptly
 remove them from their platforms while respecting
 users freedom of expression.

2.4.2. VACCINE OPPONENTS

Another critical problem to be addressed is that of the "anti-vaxxers." This movement involves a minority of people who believe that vaccines are unsafe and violate their human rights. Typically, they deny the existence or validity of science that supports their use in the general population. There are many active communities of anti-vaxxers on the Internet and social media platforms. According to a recent report in The Lancet Digital Health, about 31 million people follow anti-vaccination groups on Facebook.³⁶

Fortunately, it appears that providing persistent, abundant, statistically sound and easy-to-understand information on the positive effects of vaccination compared to the dangers of avoiding it can help overcome unfounded reluctance. Addressing the spread of MDI during the Covid-19 epidemic and in future health emergencies requires sustained and coordinated efforts by independent fact-checkers, independent news media, platform companies, and public authorities to help the public understand and navigate the pandemic.

The spread of misinformation during an epidemic can fuel public paranoia and panic and hamper efforts to contain it.

^{35.} Organization for Economic Cooperation and Development, "Combatting COVID-19 Disinformation on Online Platforms," July 3, 2020, https://www.oecd.org/coronavirus/policy-responses/combatting-covid-19-disinformation-on-online-platforms-d854ec48/.

^{36.} Talha Burki, "The Online Anti-Vaccine Movement in the Age of COVID-19," Lancet Digital Health 2, no. 10 (October 2020): e504-5, https://doi.org/10.1016/S2589-7500(20)30227-2.



3. WHY FOCUS ON ENHANCING POST-COVID-19 COOPERATION AND COORDINATION IN THE WESTERN HEMISPHERE?

Containing the pandemic should remain the first and foremost health policy priority in the Americas. Most developing countries in the region should continue to rely on current pandemic control methods until herd immunity is achieved through vaccination. At the same time, the region faces the challenge of leveraging regional cooperation and coordination to better deal with post-pandemic uncertainties and responding to the ongoing social and economic impact.

3.1. Boosting Hemispheric Cooperation on Health Emergencies

Given that the policy options available are vast and diverse, the governments of countries in the Americas region need to focus on options that leverage their strengths and are implementable in view of their institutional capacity. However, unilateral measures by governments are unlikely to be adequate. Multilateral cooperation is not only important, but also indispensable for a sustainable recovery after Covid-19. The full potential of social, fiscal, and financing policies that are under discussion for a recovery in the region can be realized only if different American countries and their international development partners work closely together. More broadly, the engagement of the private sector, civil society, and scientific and academic institutions needs to be increased through their participation and contributions to achieve more resilient and sustainable development.

A renovated approach of interaction, cooperation, and coordination in the region needs to be fostered. It should focus on inclusiveness in the post-pandemic recovery phase through three specific purposes:

- First, ensuring equal access to Covid-19 tools.
 The vaccination process to achieve regional herd immunity should serve as a common interest in all countries.
- Second, leaving no one behind within countries
 helps governments respond with the necessary
 financial and social policies to address the
 significant increase in poverty and inequalities
 in the region, particularly in Latin America and
 the Caribbean. Policy space, particularly fiscal,
 would be needed to support a robust recovery to
 help the most vulnerable countries in the region
 with less capacity to implement countercyclical
 fiscal and monetary policies than North American
 countries.
- Third, strengthening preparedness for future health emergencies through integrated and inclusive pandemic preparedness planning. Preparing for a health crisis should be a continuous process of planning, involving long-term and sustained regional investment. A pandemic plan is therefore a "living strategy," which should be reviewed, measured, accountable and tested at intervals.

3.1.1. SHAPING MORE RESILIENT HEALTH SYSTEMS TO COVID-19 AND OTHER HEALTH CRISES

The concept of resilience has become relevant in terms of society's response to health emergencies and major social shocks. The Covid-19 pandemic has underscored the importance of longer-term planning and preparedness of health systems. With this awareness comes the need to better understand the strengths and weaknesses of health systems and how to respond resiliently to the outbreak, especially in the face of a health crisis.

Although the concept of resilience has been widely used in recent decades, there is debate and sometimes confusion about its meaning and applicability when it comes to the resilience of the health system. To simplify the discussion, we refer to the latest definition used by the WHO as the ability to prepare, manage (absorb, adapt, and transform) and learn from shocks. While shock is a sudden and extreme change that affects a health system and is therefore different from the predictable and persistent stresses of the health system.³⁷

A comprehensive system approach is needed to understand the complexity of health systems and the impact of shocks on their functioning. As a result, some key strategies for strengthening the resilience of health systems in response to shocks are presented:

 Leadership to achieve effective coordination between various actors to effectively prevent, identify, and address a public health threat.

A comprehensive system approach is needed to understand the complexity of health systems and the impact of shocks on their functioning.

- Effective cooperation between sectors and different levels of government, including cooperation with other governments and international organizations to align priorities and respond to a public health threat.
- Learning from success and failure is crucial to building resilience and facilitating the timely use of evidence in the event of shock and in the future. For example, Asian countries that experienced SARS in 2003 had a swift and coordinated response to the first wave of Covid-19.
- Effective systems for exchanging information, including functional communication channels (press releases, speeches). Primary information is crucial for decision-makers and managers to react and make decisions about the best response.
- Good integration of surveillance mechanisms, including alert mechanisms, clinical and laboratory services, survey results, data on resources, evidence synthesis, and communication activities.
- Sufficient monetary resources and flexibility to ensure that a health system can respond quickly to a threat to public health. This implies the formulation and planning of specific health financing mechanisms to meet purchasing requirements to respond to a shock.
- Appropriate and well-distributed human and physical resources, including motivated and supported health personnel. This means adequate levels of health staff and infrastructure capacity to provide health services in a suitable environment (emergency, primary, and specialist care).

An important aspect of a resilient health system relies on high-quality universal health coverage. Countries closer to universal health coverage are therefore more resilient. As noted in a joint study by the OECD and the World Bank, the current crisis has shown the need to increase public health expenditures in Latin America and the Caribbean, which is low at 3.8 percent of GDP, compared to 6.6 percent of GDP in OECD countries. Moreover, the share of total health expenditures covered by government and compulsory insurance is much lower than in the OECD countries (54.3 percent compared to 73.6 percent). A shift to a greater emphasis on public spending rather than private spending

^{37.} Thomas et al., "Strengthening Health Systems Resilience."



could help increase the equity and efficiency of health spending.³⁸

Likewise, the OECD and the World Bank underscore the need for Latin America and the Caribbean to balance investment in health systems with other needs in a context of limited public funding and competing priorities. The region faces a recurring limitation of public funding, technological innovation, and changing epidemiological and demographic profiles, so investment should focus on providing high quality and affordable care while keeping waste at minimum levels in all dimensions and areas of health systems. This will help free up existing resources and increase the willingness of key stakeholders to mobilize additional health resources. In addition, it will contribute to ensuring the long-term sustainability of health systems and their resilience in response to current or future funding shortages or emerging challenges.

3.1.2. THE UNDERLYING PRINCIPLES FOR SUSTAINABLE AND LASTING COOPERATION IN THE REGION

Although the countries in the Americas have made progress in developing resilient health systems and achieving universal health coverage, the region needs to work for more sustained measures, as this health crisis may remain over time. The ability to respond regionally to the acute phase of the Covid-19 pandemic and post-recovery depends on coherent health governance that relies on the principles of solidarity, transparency, trust, and sustainability of cooperation across the region

The region, through regional and financial institutions, can implement crisis exit strategies. These institutions need to bolster their analytical research and convening power to provide policy advice on recovery policies, to help countries formulate local approaches, and to provide technical assistance and capacity building to strengthen national institutional responses. Effective regional actions require reaching out to multiple partners. The world is looking for an inclusive, resilient, and green recovery, and the countries of the Americas need to collectively seize this opportunity to bridge the development gap and address growing inequality. Active participation and involvement of the private sector, civil society, and academia play a pivotal role in building back a better world after Covid-19.

The OECD and the World Bank underscore the need for Latin America and the Caribbean to balance investment in health systems with other needs in a context of limited public funding and competing priorities.

^{38.} Organization for Economic Cooperation and Development and World Bank, "Identifying and Tackling Wasteful Spending in Latin American and Caribbean Health Systems," in Health at a Glance: Latin America and the Caribbean 2020 (OECD, 2020), https://www.oecd-ilibrary.org/social-issues-migration-health/health-at-a-glance-latin-america-and-the-caribbean-2020_0a46d053-en.

FIGURE 2. PRINCIPLES FOR SUSTAINABLE AND LASTING COOPERATION IN THE REGION

SOLIDARITY

Solidarity is always a matter of relationships. The region needs to build in "normal times" the intentional commitments when it comes to regional and subregional spheres to participate and collaborate on common health goals.

A strong sense of regional solidarity is crucial for advancing all kinds of political agendas and values on health.

Solidarity requires measures and compromises to achieve a larger goal.

TRANSPARENCY

Transparency is a key component in building consistency and trust, which are indispensable for the effectiveness of cooperation.

The region needs to rebuild core values in which cooperation on health does not support hidden agendas or conditions, and in contrast promotes the availability of complete, timely, and accurate information.

TRUST

Trust is necessary to reduce misunderstandings and to focus on creating consensus. The region needs to strengthen confidence in the existing regional mechanisms and institutions as a valuable asset for sustainable cooperation in health matters.

SUSTAINABILITY

Cooperation is sustainable if the purpose it serves and the means it is uses to achieve the purpose are not self-defeating.

Although cooperation agreements or arrangements are exceptionally stable and depend on political will, continued cooperation is mainly motivated by the ability to achieve concrete results. The region has a good precedent for sustainable cooperation (for example in regional vaccination programs) through PAHO.



4. THE WAY FORWARD FOR IMPROVING REGIONAL COOPERATION IN PANDEMIC PREPAREDNESS AND RESPONSE

From the current crisis, opportunities could be created and encouraged for the Western Hemisphere to improve the coordination and collaboration to mitigate future surges of Covid infections, join efforts to secure quality-assured Covid-19 vaccines, and work towards a regional recovery. Furthermore, it is an opportunity to approach public health governance deficits and enhance preparedness for future pandemics. Advantage should be taken of regional or sub-regional integration mechanisms to join forces, share experiences and practices in epidemic prevention and control of future or existing diseases that could threaten people's security, particularly the most disadvantaged.

4.1. Specific Recommendations

The Inter-American Health Task Force agreed its proposals should be concrete, practical, and focused recommendations. The Task Force has selected five areas to improve cooperation and coordination in health policy to support regional Covid-19 response and post-pandemic recovery in the Western Hemisphere, as well as future health emergencies:

- 1. Promoting leadership and better governance in regional health emergencies;
- Increasing access to and sharing of high-quality data;

- 3. Strengthening regional health security by investing in national preparedness;
- 4. Ensuring equitable access to Covid-19 health services and products, in particular vaccines; and
- Controlling and managing the spread of misinformation, disinformation, and conspiracy theories.

The recommendations are directed towards six specific actors: governments, multilateral organizations, international financial institutions, the private sector, scientific and academic institutions, and civil society. The recommendations are summarized in Table 1. Each of the recommendations contains a brief description of measures to implement them, as well as the relevant actor and their specific roles.

A total of 25 recommendations are proposed, prioritizing the 7 recommendations on equitable access in the short term, followed by the 5 recommendations on the exchange of high-quality data, the 5 recommendations on investing in national preparedness, the 6 recommendations on leadership and better governance, and the 2 recommendations on controlling and managing the spread of misinformation, disinformation, and conspiracy theories.



TABLE 1. A NEW TAKE ON COOPERATION AND COORDINATION ON HEALTH EMERGENCIES IN THE WESTERN HEMISPHERE: SPECIFIC RECOMMENDATIONS

RECOMMENDATIONS	GOVERNMENTS	MULTILATERAL ORGANIZATIONS (PAHO- WHO, UN, OAS)	INTERNATIONAL FINANCIAL INSTITUTIONS (IFIS)	PRIVATE SECTOR	SCIENTIFIC AND ACADEMIC INSTITUTIONS	CIVIL SOCIETY	TIMELINE	
1. PROMOTING LEADERSHIP AND BETTER GOVERNANCE IN REGIONAL HEALTH EMERGENCIES Message: Leadership, governance, political will, and trust among countries in the Western Hemisphere are necessary conditions for success in fighting this pandemic and preparing for the next one. This may seem to be a major challenge in today's geopolitical environment. However, the devastating impact of Covid-19 on all communities and countries and the universal commitment to never let this happen again offer a common purpose and agenda for transformative change in global and regional collective action.								
STRENGTHEN INTRAGOVERNMENTAL COORDINATION Promoting coordination and capacity building is a critical step in bridging gaps in public health emergency preparedness and response capacity at multisectoral levels. Multilevel intragovernmental coordination is needed to meet the challenges of silo approaches and contradictory targets in the response to Covid-19. To meet these challenges, innovative and integrated policies, but also institutional responses, must be designed, especially in the current context of fiscal constraints and climate change. The Summit of the Americas should be seized as an opportunity to strengthen intergovernmental coordination.	Manager and leader	Technical assistance	Financial assistance				Short and long term	
PROMOTE LAC REGIONAL AND GLOBAL HEALTH LEADERS MEETING, WITH BROAD PARTICIPATION FROM CIVIL SOCIETY, THE PRIVATE SECTOR, AND ACADEMIA It could be organized annually to define selected strategic areas for partnership and cooperation, set targets and review progress in Covid-19 response, post-pandemic recovery, and future emergencies. The meeting could take place during the International Monetary Fund-World Bank annual meetings and/or during the Summit of the Americas.	Participating leader	Technical participation	Organizer	Participating leader	Participating leader	Participating leader	Medium and long term	
PROMOTE BOTTOM-UP LEADERSHIP OF HEALTH PERSONNEL Ensure that the bottom-up leadership of health personnel is in the first line in responding to health emergencies. Bottom-up leadership is where ideas come in, and health workers identify opportunities through their daily operations. Inspiring bottom-up leadership is crucial, because it is often the people on the "front lines" who should inform progress and guide awareness and intervention strategies in health emergencies. Top-down innovation, on the other hand, is driven by government management and focuses on strategic response. It ensures that resources are allocated to the areas that are of the utmost importance for the response and recovery. Top-down and bottom-up leadership are equally important, especially now, when all resources must have a maximum impact.	Promoter and leader			Promoter and leader	Technical expertise		Short and long term	
SHAPE A MORE SUSTAINABLE ECONOMIC RECOVERY Seize the positive changes of Covid-19 in reducing energy consumption and promoting the introduction of technologies that can decouple the economy from its dependence on fossil fuels. Mobilizing resources from both public and private sources, on a larger scale than previously expected, must focus on a green recovery from the pandemic, focusing on creating new jobs and businesses through a "clean, green transition," which is tied to sustainable growth and resilience. For example, in the Global Investors for Sustainable Development Alliance, the private sector has pledged to establish scalable innovative financing and investment vehicles to advance the SDGs, including through Covid-19 bonds, risk-sharing tools, joint investment, and business matchmaking platforms. Such actions and commitments need to be expanded throughout the region.	Manager and leader	Promote best practices and knowledge sharing		Investment			Medium and long term	



TABLE 1. A NEW TAKE ON COOPERATION AND COORDINATION ON HEALTH EMERGENCIES IN THE WESTERN HEMISPHERE: SPECIFIC RECOMMENDATIONS (CON'T)

RECOMMENDATIONS	GOVERNMENTS	MULTILATERAL ORGANIZATIONS (PAHO- WHO, UN, OAS)	INTERNATIONAL FINANCIAL INSTITUTIONS (IFIS)	PRIVATE SECTOR	SCIENTIFIC AND ACADEMIC INSTITUTIONS	CIVIL SOCIETY	TIMELINE
BUILD A RENEWED SENSE OF CENTRALITY OF HEALTH IN NATIONAL AND GLOBAL POLICIES THROUGH INSTITUTIONAL AGREEMENTS Countries need to consider health not only as a national concern but also as a foreign policy issue fundamental to national security. Governments with the involvement and support of multilateral organizations, IFIs, private sector and civil society need to work together to ensure that all countries in the region make progress toward the goal of universal health care, as individual health care is indispensable for regional and global health security.	Manager and leader	Technical assistance and multilateral leadership	Financial assistance and multilateral leadership	Investment	Technical expertise	Advocacy	Medium and long term
BRIDGE THE GAP BETWEEN HEALTH CARE AND SOCIAL CARE Covid-19 has highlighted the growing workload and gender inequalities of women and the lack of care for children, the elderly, and people with disabilities. Strengthen social care policies in the region and their articulation with health policies by facilitating innovative policies that promote cooperation networks, shared information systems, decentralization of decision-making at the management level, and human resources training in health care.	Technical, human, and financial resources	Technical assistance	Financial assistance	Investment		Advocacy	Medium and long term

2. INCREASING ACCESS AND SHARING OF HIGH-QUALITY DATA

Message: The current Covid-19 pandemic raises important questions about the quality, transparency, sharing, and use of data, and it highlights the challenges associated with data use, data protection and privacy. High-quality data, transparency, and continued investment to ensure data protection are prerequisites for the analysis and use of big data and for the guarantee of value and exchange of open data.

ASSURE NATIONAL INVESTMENTS IN WELL-TRAINED PERSONNEL TO IMPROVE THE QUALITY OF HEALTH DATA The use of artificial intelligence, the open exchange of data, and robust country surveillance systems require increasing national investment in human resources training, and in undertakings to make digital society as inclusive as possible. An appropriate regulatory framework needs to be promoted to prioritize digital health interventions and promote health equity, including data on social determinants of health.	Investment and regulation	Technical assistance	Technical and financial assistance	Investment and technical expertise	Technical expertise	Medium and long term
STRENGTHEN THE REGIONAL SURVEILLANCE NETWORK Convene stakeholders including WHO/PAHO, major national health institutes, and scientific and academic institutions to strengthen a regional surveillance network to improve data during the Covid-19 crisis and based on this experience, support institutions with sustainable financing and legal capacity to develop a comprehensive surveillance network for the region. The immediate priorities for the surveillance network should be to (1) improve detection and reporting on Covid-19 cases and deaths and (2) establish systems for detecting vaccine breakout or reinfections that might indicate new variants of the virus. In the longer term, this regional surveillance network would rely on contributions, grants, or loans from governments, scientific and academic institutions, the private sector, and IFIs to finance investments in laboratories, training, digital technologies, and management systems necessary for high-quality data generation and reporting.	Technical, human, and financial resources	Technical surveillance assistance	Financial assistance	Investment and technical expertise	Technical expertise	Short and long term



RECOMMENDATIONS	GOVERNMENTS	MULTILATERAL ORGANIZATIONS (PAHO- WHO, UN, OAS)	INTERNATIONAL FINANCIAL INSTITUTIONS (IFIS)	PRIVATE SECTOR	SCIENTIFIC AND ACADEMIC INSTITUTIONS	CIVIL SOCIETY	TIMELINE
EXCHANGE PERIODIC AND TRANSPARENT INFORMATION The early publication and release of data and the tools used to create them should be encouraged by building trust; establishing incentives for the timely, accurate, and transparent exchange of data; and providing appropriate governance. It is crucial to discuss key aspects of core information, such as quality, use, standardization, and how the information should be shared between countries and international organizations. Best practices in strengthening information systems and using advanced analytical techniques should be promoted at country level.	Facilitating and exchange of critical health data	Technical guidance and support	Technical and financial support	Exchange of critical data	Technical expertise		Short and long term
STRONGLY SUPPORT THE SHARING OF OPEN DATA Governments, research funding agencies, and research-supporting institutions in the world and the region must coordinate, support, and promote open science through policy and investment to streamline the flow of data between local institutions and across international jurisdictions.	Investment and regulation of open data	Technical guidance and support		Investment and technical expertise in open data	Technical expertise and share open data		Medium and long term
DEVELOP AND STRENGTHEN DIGITAL HEALTH The national health authorities must invest in developing instruments and technical guidance for the use and implementation of digital health technologies. They should fully adopt electronic health records and associated policies for interoperability, telehealth, and electronic prescriptions. Regional initiatives with mixed financing should promote greater use of digital health technologies within an appropriate national governance framework, while taking advantage of scale economies in design, standardization, and infrastructure linkages.	Technical, human, and financial resources	Technical guidance and support	Technical guidance and financial support	Investment and facilitate technical expertise	Technical expertise and support	Advocacy	Medium and long term

3. STRENGTHENING REGIONAL HEALTH SECURITY BY INVESTING IN NATIONAL PREPAREDNESS

Message: The world needs a new era of cooperation and collaboration for IHR implementation. It is imperative to enable transparent, independent, and regular assessments of the core capacities and preparedness of countries for future pandemics; understand gaps in performance of countries' responses to public health outbreaks; and support countries in prioritizing investments in health security and the strengthening of health systems.

ESTABLISH PERIODICAL PEER NETWORK FOR ENFORCEMENT OF THE IHR An independent, transparent, regular third-party evaluation system for pandemic preparedness and response should be set up with the support of PAHO and multilateral development banks. A regional institution should be selected as a secretariat to control a process of annual peer reviews of national pandemic preparedness, including periodic exercises to test systems for adequacy and timeliness. Such peer reviews would provide numerous benefits, including (1) sharing of information between countries, (2) bringing international attention to government functions that have often been neglected, and (3) improving the quality of preparedness plans by testing them. These exercises should be led by national emergency teams with the participation of other key authorities, including, but not limited to, health, transport, public communications, and security.	Technical, human, and financial resources	Technical and assessment support	Financial assistance	Technical expertise	Medium and long term
STRENGTHEN INVESTMENTS IN HEALTH SYSTEM TO HELP INCREASE PUBLIC HEALTH CAPACITY AND IMPROVE PUBLIC SERVICES For example, investing in enhancing primary health care can help public health systems' surveillance and response functions while improving frontline services for all.	Technical, human, and financial resources	Technical assistance	Financial assistance	Investment	Medium and long term



RECOMMENDATIONS	GOVERNMENTS	MULTILATERAL ORGANIZATIONS (PAHO- WHO, UN, OAS)	INTERNATIONAL FINANCIAL INSTITUTIONS (IFIS)	PRIVATE SECTOR	SCIENTIFIC AND ACADEMIC INSTITUTIONS	CIVIL SOCIETY	TIMELINE
ENSURE HEALTH SECURITY REMAINS AMONG THE TOP CONSIDERATIONS IN THE DISCUSSION WITH MINISTERS OF FINANCE In prioritizing financing needs, it is crucial to promote and protect not only human capital, but also efforts to stimulate inclusive economic growth and reduce poverty.	Intragovernmental coordinating role		Technical support with minister of finance				
EXPAND EXISTING CDC GLOBAL HEALTH PARTNERSHIPS WITH THE REST OF LATIN AMERICA AND THE CARIBBEAN The region would benefit from expanding and strengthening the US Center for Disease Control and Prevention (CDC) collaboration with Central American countries, Mexico, the Dominican Republic, Haiti, and Guyana with the rest of the countries through subregional clusters. Public health emergencies are best managed in a collaborative approach between countries. It also helps to foster national capacities in epidemiology, monitoring, informatics, laboratory systems, and in general, to meet IHR core capacities.	Intergovernmental coordinating	Technical assistance			Technical expertise		Medium and long term
SUPPORT AND ENSURE ACTIVE PARTICIPATION IN DISCUSSIONS ON A LEGALLY BINDING FRAMEWORK CONVENTION FOR PANDEMIC PREPAREDNESS AND RESPONSE The region should engage in these discussions and coordinate it through the Member States Working Group on Strengthening WHO Preparedness and Response to Health Emergencies, which, among other things, must establish a priority in assessing the benefits of developing a WHO convention or agreement or other international instrument on pandemics. The working group will submit a report to the special session of the World Health Assembly in November 2021, with a view toward an intergovernmental process to draft and negotiate such an instrument.	Leadership and ensuring country participation	Technical expertise and advice	Technical expertise and advice		Technical expertise and advice	Technical expertise and advice	Short and long term

4. ENSURING EQUITABLE ACCESS TO COVID-19 HEALTH SERVICES AND PRODUCTS, IN PARTICULAR VACCINES

Message: Ensuring equal access to Covid-19 health services and products - in particular, vaccines - would maximize social and economic recovery and bring the pandemic under control in the region. Therefore, all stakeholders should act to protect the populations with the greatest unmet need, provide further financial and in-kind support to COVAX, and ensure availability of Covid-19 vaccines, including by expanding production and manufacturing capacity, sharing intellectual property, and facilitating technology transfer.

STRENGTHEN NATIONAL REGULATORY AUTHORITIES IN LATIN AMERICA AND THE CARIBBEAN According to a recent PAHO report, robust regulatory capacities from expansive legal and organizational frameworks are necessary to give technical independence to national regulatory agencies (NRArs) and strong mandates to monitor and sanction drug approvals. Strong, independent and science-based regulatory authorities are need to improve access to safe and effective medicines and health technologies and oversee compliance with quality standards. The manufacture of increasingly complex medical products requires stronger surveillance and control. Post-marketing surveillance and pharmacovigilance is a potential weakness of systems. Financial and human resources for national regulatory authorities have remained relatively static over the last five years in Latin America, while the pharmaceutical market has increased both in value, volume, and medical product complexity.	Technical, human, and financial resources	T e chnical regulatory assistance		Facilitate timely, transparent, and accurate information			Short and long term
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RECOMMENDATIONS	GOVERNMENTS	MULTILATERAL ORGANIZATIONS (PAHO- WHO, UN, OAS)	INTERNATIONAL FINANCIAL INSTITUTIONS (IFIS)	PRIVATE SECTOR	SCIENTIFIC AND ACADEMIC INSTITUTIONS	CIVIL SOCIETY	TIMELINE
IMPROVE REGIONAL COORDINATION ON COVAX Countries can work together to make sure that enough financial resources are made available to COVAX to meet its financing needs; there is still a considerable distance to go to bridge the financing gap. In addition, ensuring that countries with manufacturing capacity do not restrict export of vaccines is essential in ensuring a proper distribution of vaccine to the poorer countries.	Co-leadership, and financial resources	Co-Leadership and technical assistance	Co-Leadership and financial assistance	Technical and financial support			Short and medium term
ESTABLISH NATIONAL STOCKPILES OF MEDICAL SUPPLIES Most countries in the region need to work to ensure a national repository of potentially life-saving pharmaceuticals and medical supplies to be used in public health emergencies severe enough to cause national supplies to run out. Canada and the United States have such a mechanism in place, with specific regulations on the access by local authorities to the stockpiles.	Technical, human, and financial resources	Technical assistance		Support and facilitation of supply	Technical expertise		Medium and long term
INCENTIVIZE AND INCREASE REGIONAL MANUFACTURING CAPACITY, SUPPLY, AND SCALE-UP PROCESS FOR COVID-19 VACCINES AND TREATMENTS The development and construction of a new manufacturing capacity for Covid-19 vaccines is both resource and time intensive. A social investor - such as the country government, a development finance institution, or private philanthropy - can use a range of financial instruments to encourage more significant investment in manufacturing capacity, either in-house (United States, Mexico, Brazil, and Argentina) or by adding partnerships with other manufacturers. The PAHO-WHO technical advice will be crucial to identifying the most cost-effective instrument that incentivizes Covid-19 vaccine developers to build sufficient capacity to meet regional demand, particularly for LAC countries. It will also be crucial to facilitate the transfer of relatively new technology. Nucleic acid vaccines (DNA or RNA) have been shown to be of high protection. Once the genome of a pathogen has been sequenced, it is relatively quick and easy to design a vaccine against any of its proteins.	Formulating incentives and financial support	Technical assistance	Financial assistance	Investment, sharing manufacturing best practices and scale-up process, sharing intellectual property, and facilitating technology transfer.	Technical expertise		Short and long term
INCENTIVIZE AND STRENGTHEN REGIONAL PROCUREMENT NEGOTIATIONS Governments can negotiate better prices and more reliable supplies for medical inputs by combining their purchases into larger volumes. That way, they can reduce transaction costs, achieve economies of scale, and thus obtain unit-cost savings from sellers. The PAHO Strategic Fund and the Revolving Fund are examples of aggregate demand across countries. A regional public institution - either new or housed in an existing institution - should be created to give countries the opportunity to buy medicines, medical supplies, equipment, and vaccines. Seed capital for this institution would offer even greater bargaining power to obtain the best price-quality combinations for member countries. Eligibility criteria could be established to promote better performance, such as requiring progress in digitizing purchases or establishing minimum annual purchases.	Leadership, financial resources	Technical procurement assistance	Financial and technical assistance				Short and long term
OPTIMIZE THE DELIVERY OF HEALTH SERVICES AND PLATFORMS Health systems in the region must act, prioritize, and formulate national strategies to identify essential health services to respond to increasing demand for services related to Covid-19 collateral effects (long Covid) and unattended or delayed patients during the pandemic. This should include, as recommended by the WHO, effective patient flow at all levels of care, investment in human resources, funding public health and eliminating financial barriers to access, the use of digital platforms and monitoring capacity to support the provision of essential health services.	Technical, human, and financial resources	Technical guidance and support		Investment and facilitate technical expertise	Technical expertise		Short and long term



RECOMMENDATIONS	GOVERNMENTS	MULTILATERAL ORGANIZATIONS (PAHO- WHO, UN, OAS)	INTERNATIONAL FINANCIAL INSTITUTIONS (IFIS)	PRIVATE SECTOR	SCIENTIFIC AND ACADEMIC INSTITUTIONS	CIVIL SOCIETY	TIMELINE
ACCELERATE THE IMPLEMENTATION OF THE TRADE FACILITATION AGREEMENT (TFA) An accelerated implementation of TFA is difficult but necessary in the context of Covid-19, as cross-border trade is critical to bringing essential health products to the populations that need them. The WTO can play a more forceful role to minimize or remove export restrictions that impede supply chains for medical goods and equipment.	Management and implementation	Technical guidance and support	Financial and technical guidance	Support and facilitation of supply chains		Advocacy	Short and long term

5. CONTROLLING AND MANAGING THE SPREAD OF MISINFORMATION, DISINFORMATION, AND CONSPIRACY THEORIES

Message: The best way to deal with the spread of misinformation, disinformation, and conspiracy theories are a growing threat that will ultimately require global and regional cooperative efforts among researchers, governments, and social media platforms.

PROMOTE ACCOUNTABILITY FOR GOVERNMENTS AND INTERNATIONAL AND REGIONAL HEALTH AUTHORITIES TO PROMOTE INFORMATION BASED ON SCIENCE Governments and global and regional health authorities must make coordinated and consistent efforts to publish accurate and context-appropriate information, supported by scientific evidence of health outbreaks, on their websites and elsewhere. Building trust between citizens and government, as well as international and regional health agencies, is crucial in a health crisis response.	Co-leadership	Co-leadership	Scientific support and advocacy		Short and long term	
DEVELOP SPECIFIC MEASURES TO COUNTER MISINFORMATION, DISINFORMATION, AND CONSPIRACY THEORIES National and international agencies, including fact-checking agencies, should not only identify and debunk rumors and conspiracies, but should also engage social media companies to spread correct information. Likewise, online platforms need to play a more vigilant role by improving vetting, and fact-checking. It could include hiring more reviewers, providing additional support to several external fact-checking organizations, developing automated content moderation systems, and further prioritizing high-quality, reliable content. In this scenario, misleading and fake content could continue to be uploaded, but it would significantly reduce the speed and extent of its dissemination.	Co-leadership and development of communication tools	Co-leadership and development of communication tools	Technical expertise on communication tools		Short and long term	

GLOSSARY

Access to COVID-19 Tools (ACT) Accelerator

A global collaboration to accelerate the development, production and equitable access to new Covid-19 diagnostics, therapeutics, and vaccines. Launched in April 2020, ACT brings together governments, scientists, businesses, civil society, and philanthropists with global health organizations (the Bill & Melinda Gates Foundation, the Coalition for Epidemic Preparedness Innovations (CEPI), the Foundation for Innovative New Diagnostics, Gavi, the Global Fund, Unitaid, Wellcome, the World Health Organization (WHO), and the World Bank).

Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement)

An international legal agreement among members of the World Trade Organization. It was signed in 1994 and became effective in 1995. The Doha Declaration, issued in November 2001, indicated that the TRIPS Agreement should not prevent states from dealing with public health crises and allowed the issuance of compulsory licenses under some circumstances, such as national emergencies.

Anti-vaxxer

A person who disagrees with the use of vaccines for a variety of reasons.

CARICOM

The Caribbean Community is a grouping of 20 countries: 15 member states and five associate members. It was created in 1973 and rests on four main pillars: economic integration, foreign policy coordination, human and social development, and security.

Coalition for Epidemic Preparedness Innovations (CEPI)

A public-private coalition that aims to stop epidemics by accelerating vaccine development. Founded in 2017, its headquarters are in Norway.

Conspiracy theory

Explanatory beliefs about an individual or group of people working in secret to reaching malicious goals.

COVAX

The Global Access Fund for Covid-19 Vaccines is an alliance promoted by public and private actors with the aim of guaranteeing fair and equitable access to the vaccines that are developed against the Covid-19 coronavirus for every country in the world, being one of the three pillars of the Accelerated Access of Tools against Covid-19. COVAX is co-led by CEPI, Gavi, and the WHO, alongside key delivery partner UNICEF.

Disinformation

False and malicious information, which is shared with the purpose of misleading others.



Epidemiological surveillance

Ongoing, systematic collection, analysis, and interpretation of health-related data essential to the planning, implementation, and evaluation of public health practice. Surveillance is undertaken to inform disease prevention and control measures.

Fake news

Purposefully crafted, sensational, emotionally charged, misleading or totally fabricated information that mimics the form of mainstream news.

Gavi

An international organization created in 2000 with the participation of public and private sectors. Its goal is to achieve equal access to new and underused vaccines for children living in the world's poorest countries.

Global Fund

A partnership organization and financial mechanism dedicated to accelerating the end of HIV/AIDS, tuberculosis, and malaria.

Genomic surveillance

A consistent, coordinated screening of positive samples at multiple sites within a country or region. Full sequencing of viral genomes is the cornerstone of surveillance efforts, as it reveals the full genome of the virus and provides a definitive look at what variants are present. The technology that allows one to obtain the genetic information of a particular sample is called genome sequencing. These techniques provide insights on how virus populations are changing and how a virus is evolving.

Global Research Collaboration for Infectious Disease Preparedness (GloPID-R)

An international initiative to anticipate and prepare for future threats from infectious diseases. Founded in 2013, it is intended to be a means for facilitating communication and collaboration between its member bodies.

Independent Panel for Pandemic Preparedness and Response

A group established by the World Health Organization (WHO) director general in response to a resolution adopted by the World Health Assembly. The panel's mission is to provide an evidence-based path for the future, grounded in lessons of the present and the past to ensure countries and global institutions, including specifically the WHO, effectively address health threats.

Infodemic

An overabundance of information—some accurate and some not—that makes it hard for people to find trustworthy sources and reliable guidance when they need it. The term was coined by the WHO to categorize some of the common features of rumors, stigma, and conspiracy theories during public health emergencies.

International Health Regulations (2005)

The IHR are an instrument of international law that is legally-binding on 196 countries, including the 194 WHO Member States. It provides an overarching legal framework that defines countries' rights and obligations in handling public health events and emergencies that have the potential to cross borders.

Machine learning (ML)

A data analysis method that automates the construction of analytical models. It is a branch of artificial intelligence based on the idea that systems can learn from data, identify patterns, and make decisions with minimal human intervention.

Misinformation

Misinformation is false and often harmful information, which is not shared with malicious intent

Nagoya Protocol

In force since 2014, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is a global agreement that implements the access and benefit-sharing obligations of the Convention on Biological Diversity.

Noncommunicable disease (NCD)

Also known as chronic diseases, noncommunicable diseases tend to be of long duration and are the result of a combination of genetic, physiological, environmental, and behavioral factors. The main types of NCD are cardiovascular diseases (such as heart attacks and stroke), cancers, chronic respiratory diseases (such as chronic obstructive pulmonary disease and asthma), and diabetes.

One Health

The WHO defines "One Health" as an approach to the development and implementation of programs, policies, legislation and research in which several sectors communicate and work together to achieve better public health outcomes. The areas of work in which a One Health approach is particularly relevant include food safety, the control of zoonoses (diseases that can spread between animals and humans, such as flu, rabies, and Rift Valley Fever), and the fight against antibiotic resistance (when bacteria change after being exposed to antibiotics and become more difficult to treat).

Public Health Emergency of International Concern (PHEIC)

An even that the WHO has declared to be an extraordinary event that is determined to constitute a public health risk to other states through the international spread of disease and to potentially require a coordinated international response.

Revolving Fund for Access to Vaccines

A mechanism established in 1977 for the joint procurement of vaccines, syringes, and related supplies for participating member states of the Pan American Health Organization.



Social safety nets

Noncontributory assistance to improve the lives of vulnerable families and people in poverty and deprivation. Examples of social safety nets are previously contributory social pensions, in-kind and food transfers, conditional and unconditional cash transfers, fee waivers, public works, and school food programs.

Sustainable Development Goals (SDGs)

A set of global sustainable development priorities and aspirations translated into 17 interlinked global goals and 169 targets as the foundation for an effort to achieve a better and more sustainable future for all. The SDGs were set up in 2015 by the United Nations General Assembly and are intended to be achieved by the year 2030. The SDGs call for worldwide action among governments, business, and civil society.

SARS-CoV-2 Sequencing for Public Health Emergency Response, Epidemiology and Surveillance (SPHERES)

A consortium of health laboratories, academic institutions, and the private sector. Led by CDC's Advanced Molecular Detection Program to coordinate SARS-CoV-2 sequencing, SPHERES's main aim is to accelerate the use of real-time pathogen sequence data and molecular epidemiology for the Covid-19 pandemic response.

Unitaid

Unitaid is a multilateral partnership hosted by the WHO. It was created in 2006 as part of the global response to HIV/AIDS, tuberculosis, and malaria in developing countries by the governments of Brazil, Chile, France, Norway, and the United Kingdom as the International Drug Purchasing Facility with the aim of improving access to better, more effective, and more affordable medicines and technologies to those in need. Today it is backed by additional countries, the Bill & Melinda Gates Foundation, and other civil society organizations.

Universal access to health and universal health coverage

A term implying that all people and communities have access, without any kind of discrimination, to comprehensive, appropriate, and timely quality health services determined at the national level according to needs, as well as access to safe, effective, and affordable quality medicines, while ensuring that the use of such services does not expose users to financial difficulties, especially groups in conditions of vulnerability.

Variant of concern

A disease variant for which there is evidence of an increase in transmissibility, more severe disease (for example, increased hospitalizations or deaths), significant reduction in neutralization by antibodies generated during previous infection or vaccination, reduced effectiveness of treatments or vaccines, or diagnostic detection failures. A variant of concern is declared by public health agencies.

Wellcome Trust

A London-based global charitable organization devoted to supporting science to solve the urgent challenges of mental health, climate change, and infectious diseases.

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Task Force Members

Julio Frenk

Mexico | President, University of Miami, Co-chair, Inter-American Health Task Force

Julio José Frenk Mora is a Mexican physician and academic currently serving as president of the University of Miami. He is the university's first Hispanic president. Prior to assuming his current position, Frenk was dean of faculty at the Harvard T.H. Chan School of Public Health and, before that, minister of health of Mexico. During his tenure at Harvard, Frenk quadrupled fundraising for the school and steered a transformative \$350 million naming gift – the largest single gift in Harvard's history. He is also credited with balancing the school's budget, diversifying a large portfolio of annual sponsored research, and launching a comprehensive educational reform effort. As minister of heath of Mexico from 2000 to 2006, Frenk reformed Mexico's health system and introduced universal health insurance, Seguro Popular, which expanded access to health care for millions of uninsured Mexicans. He has been recognized by his peers and received numerous awards, including the Clinton Global Citizen Award for changing the way practitioners and policy makers think about health.

Helene Gayle

United States | President & CEO, The Chicago Community Trust, Co-chair, Inter-American Health Task Force

Helene D. Gayle is president and CEO of The Chicago Community Trust. Before assuming leadership of the Trust in October 2017, Gayle was CEO of McKinsey Social Initiative, a nonprofit that brings together varied stakeholders to address complex global social challenges. From 2006 to 2015, she was president and CEO of CARE USA. An expert on global development, humanitarian and health issues, Gayle spent 20 years with the Centers for Disease Control, working primarily on HIV/AIDS. She also worked at the Bill & Melinda Gates Foundation, directing programs on HIV/AIDS and other global health issues. Gayle serves on public company and nonprofit boards including The Coca-Cola Company, Colgate-Palmolive Company, the Rockefeller Foundation, Brookings Institution, the Center for Strategic and International Studies, New America and the ONE Campaign. She is a member of the Council on Foreign Relations, the American Public Health Association, the National Academy of Medicine, the National Medical Association and the American Academy of Pediatrics.

Beatriz Londoño

Colombia | Technical Director, Inter-American Health Task Force, Inter-American Dialogue

Beatriz Londoño is an independent consultant who has served as secretary of health of Bogota, director general of the National Institute of Family Wellbeing, vice minister and minister of Health and Social Protection, ambassador of Colombia to Switzerland and permanent representative of her country before the United Nations in Geneva. Londoño participated in the design of the first safety nets formally developed in Colombia while she was in the National Department of Planning. Some of her areas of interest are poverty reduction linked to early childhood development and policy formulation process to prevent non communicable diseases in the developing world.

Sir George Alleyne

Barbados | Director Emeritus, Pan American Health Organization (PAHO)

Sir George Alleyne is director emeritus, Pan American Health Organization (PAHO). He served two four-year terms from 1995 to 2002 as the regional director at PAHO, the WHO's Regional Office for the Americas. In October 2003, he was appointed chancellor of the University of the West Indies. He is adjunct professor at the Bloomberg School of Public Health, Johns Hopkins University. From 2003 through 2010, he served as the UN Secretary General's special envoy for HIV/AIDS in the Caribbean region. He was responsible of ensuring follow-up to the United Nations General Assembly special session on HIV/AIDS and the Pan-Caribbean Partnership against HIV/AIDS, in the Caribbean region.



Julio Bango

Uruguay | Professor and Researcher of Social and Economic Sciences, Universidad de la República

Julio Bango is a professor and researcher of the Faculty of Social and Economic Sciences at the Universidad de la República in Montevideo, Uruguay. He focuses on the design, management, and evaluation of social policies, emphasizing childhood, adolescence, and youth. He was director of Childhood of the Municipality of Montevideo from 2000 to 2004. From 2005 to 2010, he served as director of the childhood, adolescence, and family program of the Ministry of Social Development. He was elected national representative for Montevideo by the Socialist Party and served from 2010-2015.

Catalina Botero

Colombia | Co-chair, Facebook's Oversight Board, Former Special Rapporteur for Freedom of Expression, Inter-American Commission on Human Rights

Catalina Botero, former dean of the Law School at University of Los Andes, is a member of Facebook and Instagram's new independent oversight board, which is in charge of reviewing decisions made about the content on these two social media platforms. She served as the special rapporteur for freedom of expression for the Organization of American States' Inter-American Commission on Human Rights from 2008 to 2014, as well as auxiliary magistrate at the Constitutional Court of Colombia for several periods. She is also a member of the awards committee of the Columbia University Global Freedom of Expression Prize. Botero received her law degree from Universidad de Los Andes and completed her postgraduate studies in public management, administrative and constitutional law, and human rights.

Marcelo Cabrol

Argentina | Manager, Social Sector, Inter-American Development Bank

Marcelo Cabrol leads a multidisciplinary team that supports the countries in the region to formulate public policy solutions to reduce poverty and improve the delivery of education, work, social protection, and health services. Prior to his appointment, he served as the external relations manager of the IDB. In this capacity, Cabrol spearheaded a major modernization of the IDB's communication activities. Between 2007 and 2012, Cabrol was chief of the IDB's Education Division. In that role he promoted projects that employed cutting-edge technologies to expand the coverage and raise the quality of education in Latin America and the Caribbean. Previously he served as principal advisor to the executive vice president of the IDB, providing quality and operational oversight of projects in the social sectors, state modernization, science and technology, and microenterprise. He joined the bank in 1998 as a project specialist. Cabrol obtained a bachelor's degree in economics and political science from Universidad del Salvador in Buenos Aires and a master's degree in public policy from Georgetown University. He completed doctoral studies in government and public policy (ABD) at Georgetown.

Oscar Chacón

United States | Co-Founder and Executive Director, Alianza Americas

Oscar Chacón is the co-founder and executive director of Alianza Americas, an umbrella of immigrant-led and immigrant serving organizations in the United States. Before that, he served in leadership positions at the Chicago-based Heartland Alliance for Human Needs and Human Rights, the Northern California Coalition for Immigrant and Refugee Rights, the Boston-based Centro Presente, and several other community based and international development organizations. Chacón also served on multiple advisory committees to national and international processes including the Civil Society Consultation Process associated with the Global Forum on Migration and Development and the World Social Forum on Migration.

Monica de Bolle

Brazil | Senior Fellow, Peterson Institute for International Economics (PIIE), Adjunct Lecturer, Latin American Studies Program, Johns Hopkins SAIS

Monica de Bolle is a senior fellow at the Peterson Institute for International Economics (PIIE) and adjunct lecturer in the Latin American Studies Program, Johns Hopkins SAIS. Named as "Honored Economist" in 2014 by the Order of Brazilian Economists for her contributions to the Brazilian policy debate, de Bolle focuses on macroeconomics, foreign exchange policy, monetary and fiscal policy, trade and inequality, financial regulation, and capital markets. Prior to joining the Institute, de Bolle was professor of macroeconomics at the Pontifical Catholic University of Rio de Janeiro, as well as managing partner of Galanto MBB Consultants, a macroeconomics advisory firm. She was also a director at the Rio de Janeiro-based Institute for Economic Policy Research, and an economist at the International Monetary Fund. De Bolle has authored and coauthored several books on the global economy and Brazil's policy challenges.

Patricia García

Peru | Professor of the School of Public Health, Cayetano Heredia University (UPCH), Former Minister of Health

Patricia J. García, is a professor at the School of Public Health at Cayetano Heredia University (UPCH) in Lima-Peru. She is the former minister of health of Peru, former dean of the School of Public Health at UPCH, and former chief of the Peruvian National Institute of Health (INS). She is recognized as a leader in Global Health and has been member of the PAHO Foundation Technical Advisory Group (FTAG), board member of the Consortium of Universities in Global Health and president of the Latin American Association Against STDs (ALACITS). She is affiliate professor of the Department of Global Health at University of Washington and the School of Public Health at Tulane University. García is actively involved in research and training in global health, reproductive health, STI/HIV, HPV and medical informatics. She has been recently appointed member of the United States National Academy of Medicine, becoming the first Peruvian professional with such a distinction.

Steven Hoffman

Canada | Dahdaleh Distinguished Chair in Global Governance & Legal Epidemiology and Professor of Global Health, Law, and Political Science, York University

Steven J. Hoffman is co-leading Canada's rapid health research response to Covid-19 as the scientific director of the CIHR's Institute of Population & Public Health. Hoffman coordinates a global social science research response as chair of the International Funders Forum for Social Science Research on Infectious Diseases. His research combines international law and epidemiology to address transnational health threats, particularly pandemics and antimicrobial resistance. Hoffman is a member of the Pierre Elliott Trudeau Foundation's Covid-19 Impact Committee. He serves as the director of the Global Strategy Lab, the director of the WHO Collaborating Centre on Global Governance of Antimicrobial Resistance, and the scientific director of the CIHR Institute of Population & Public Health at the Canadian Institutes of Health Research. He holds courtesy appointments as a professor of Clinical Epidemiology & Biostatistics (Part-Time) at McMaster University and as an adjunct professor of Global Health & Population at Harvard University.

Donna Hrinak

United States | Senior Vice President, Royal Caribbean Group

Donna Hrinak is senior vice president of corporate affairs at the Royal Caribbean Group. Prior to joining Royal Caribbean, she was president of Boeing Brazil, Boeing Latin America, and Boeing Canada. She was also vice president of global public policy and government affairs at PepsiCo and corporate affairs director for Latin America and the European Union at Kraft Foods. She also previously held numerous diplomatic posts, serving as US ambassador to Brazil (2002-2004), Venezuela (2000-2002), Bolivia (1997-2000), and the Dominican Republic (1994-1997), as well as deputy assistant secretary of state for inter-American affairs (1991-1993). Hrinak serves on the boards of Inter-American Dialogue and Adtalem Global Education. She is also a member of the International Women's Forum (IWF) and of the Organization of Women in International Trade (OWIT). She writes and speaks frequently on foreign policy and gender issues.



Carlos Felipe Jaramillo

Colombia | Vice President for Latin America and the Caribbean, The World Bank Group

Carlos Felipe Jaramillo is vice president for Latin America and the Caribbean Region at the World Bank. Under his leadership, the bank's operations in the region focus on fueling growth, reducing poverty, supporting equality, and protecting the environment. Jaramillo previously served as country director for Kenya, Rwanda, Somalia, and Uganda, based in Nairobi. Prior to his role in Africa, he was senior director of the World Bank's Macroeconomics, Trade and Investment Global Practice (MTI), where he led a global team of more than 450 economists. Since joining the World Bank in 2002, he has also served two terms as country director in the Latin America and Caribbean Region.

Natalia Kanem

Panama | Executive Director, United Nations Population Fund

Natalia Kanem became the fifth executive director of the United Nations Population Fund (UNFPA) in October 2017. Prior to that, she served as UNFPA representative in Tanzania. She is the founding president of ELMA Philanthropies Inc., a private institution focusing on children and youth in Africa. Before that, she worked as a senior associate at the Lloyd Best Institute of the West Indies, focusing on development in the Caribbean. From 1995 to 2005, Kanem worked at the Ford Foundation, first as a representative for West Africa, pioneering work on women's reproductive health and sexuality, and later at the Foundation's headquarters in New York as deputy vice-president for its worldwide peace and social justice programs. Kanem holds a medical degree from Columbia University, a Master's degree in Public Health from the University of Washington, Seattle, and a bachelor's degree from Harvard University, where she studied history and science.

Felicia Marie Knaul

Canada | Director, University of Miami Institute for Advanced Study of the Americas

Felicia Marie Knaul is the director of the University of Miami Institute for Advanced Study of the Americas. She is also a full professor at UM's Miller School of Medicine. She is a full member of the Cancer Control Program at the Sylvester Comprehensive Cancer Center. From 2009 to 2015, Knaul was associate professor at Harvard Medical School, and director of the Harvard Global Equity Initiative, an inter-faculty program chaired by nobel laureate Amartya Sen. Her research focuses on global health, cancer, and especially breast cancer, access to pain relief and palliative care, health systems, and reform, health financing, women and health, medical employment, poverty and inequity, female labor force participation, and at-risk children and youth. She is the lead author of the Lancet report, "Alleviating the access abyss in palliative care and pain relief – an imperative of universal health coverage." From 2012-2015, she was a member of the Lancet Commission on Women and Health and a leading co-author of the June 2015 report. In 2013-2014, she participated in the Lancet Series Universal Health Coverage in Latin America.

Claudia López

Colombia | Mayor of Bogotá

Claudia López is the mayor of Bogotá, previously serving as a senator from 2014 to 2019. She was the vice-presidential candidate in the 2018 presidential election for the Green Alliance. Her dedication to strengthening human rights and the rule of law makes her one of the most well-known contributors to democratic development. She was a researcher for New Rainbow Corporation and Civil Society Electoral Mission. She helped found the Electoral Observatory Mission, a coalition of NGOs and journalists that monitors Colombia's political processes and worked at New Rainbow Foundation as an analyst of illegal groups and armed conflict.

Rafael Lozano

Mexico | Professor of Health Metrics Science and Director of Health Systems at the Institute for Health Metrics and Evaluation, University of Washington

Rafael Lozano, MD, MSc, is a professor of health metrics sciences and the director of health systems at the Institute for Health Metrics and Evaluation (IHME) at the University of Washington. Lozano is a member of the National System of Researchers Level III (highest) in Mexico, the National Academy of Medicine of Mexico, and the Mexican Academy of Sciences. In 2015, he received the Medal of Health Merit from the Mexican Society of Public Health. In 2016, he was awarded the Health Award for Lifetime Achievement in Research by the Carlos Slim Foundation, and in 2017, he was recognized as Researcher of Excellence in Medical and Health Sciences by the Commission of the National Institutes of Health of the Ministry of Health in Mexico. Prior to joining IHME, Lozano worked as director of the Centre of Health Systems Research at the National Institute of Public Health (2013–2017) and as the general director of health information at the Ministry of Health in Mexico (2001–2007), where he coordinated the Health Information System for the Ministry of Health and the production of national health statistics. Overseeing the health information systems, Lozano played a critical role in the construction of Mexico's health reform through a systematic approach to evidence building. Prior to this, he worked at the World Health Organization (WHO) in Geneva as senior epidemiologist for the Global Program on Evidence for Health Policy for three years (1998–2001). Lozano holds an MD from Universidad Nacional Autonoma de Mexico and a Master's in Social Medicine from Universidad Autonoma Metropolitana in Mexico.

Carl Meacham

United States | Deputy Vice President, International Advocacy, Pharmaceutical Research and Manufacturers of America

Carl Meacham is deputy vice president, international advocacy at PhRMA. He was previously associate vice president for Latin America in the international advocacy division at Pharmaceutical Research and Manufacturers of America, or PhRMA. Before joining PhRMA, he led government relations efforts for Uber in Chile, Argentina, Uruguay and Paraguay. Prior to that, Meacham was director of the Americas Program at the Center for Strategic and International Studies, or CSIS, in Washington. He joined CSIS from the U.S. Senate Foreign Relations Committee, where he served for more than a decade on the senior professional staff for Sen. Richard Lugar (R-Ind.). Meacham was the senior advisor on the committee for Latin America and the Caribbean, the most senior Republican Senate staff position for the region. Prior to his work on the committee's Republican staff, Meacham worked for two Democratic senators. He is a registered independent. Before working in Congress, Meacham served at the U.S. Department of Commerce as special assistant to the deputy secretary, at the Cuban Affairs Bureau of the State Department and at the U.S. embassy in Madrid.

Salvador Paíz

Guatemala | President, FunSEPA, Co-chairman of Grupo PDC

Salvador Paíz is a Guatemalan businessman and president of the Fundación Sergio Paiz Andrade (FunSEPA), a foundation dedicated to improving the quality of education in Guatemala through technology. Paíz is currently Chairman of Grupo PDC, a holding company with interests in distribution and real estate finance throughout Central Americas. Paíz is also director of the Foundation for the Development of Guatemala (FUNDESA) and works on the Mejoremos Guate initiative, a holistic development agenda for the country with short-term actionable projects. Paíz is co-author of two fiscal studies requested by Guatemala's Coordinating Committee of Agricultural, Commercial, Industrial and Financial Associations (CACIF). His econometric work on the topic of contagion has been widely published. In 2009, Paíz was the first Guatemalan named Young Global Leader by the World Economic Forum.



Feliciano Reyna

Venezuela | Founder and Executive Director, Accion Solidaria

Feliciano Reyna is the founder and executive president for Acción Solidaria, an HIV/AIDS service organization created in 1995. Since 2016, he has also served as coordinator for relief efforts through the organization's Humanitarian Action Program, focused on the complex humanitarian emergency affecting Venezuela. Between 2005 and 2012, he was president of Sinergia, the Venezuelan Association of Civil Society Organizations. In 2003, together with other health-rights activists, Reyna helped create the Coalition of Organizations for the Right to Health and Right to Life (CODEVIDA) to promote and defend the rights of people with chronic health conditions. In March 2010, Reyna helped found CIVILIS Human Rights to document and inform on the state of democracy and human rights in Venezuela. Reyna is a board member of the International Center for Non-profit Law (ICNL) and was a board member at the Johannesburg-based Global Alliance for Citizen Participation (CIVICUS) between 2010 and 2016.

Fernando Ruiz

Colombia | Minister of Health

Fernando Ruiz Gomez is the minister of health of Colombia. Before becoming minister, he served as scientific director of the Cancer Treatment and Research Center project. He was also a health sector consultant for the World Bank. He directed the project and the implementation of the first Comprehensive Center for Cancer Care in Latin America. He was also director of the Center for Development Projects (CENDEX) of Universidad Javeriana. He has published mainly research papers on health economics, health inequalities, and public health systems. Ruiz holds a Master's degree in public health/occupational health from the Harvard School of Public Health in Boston, and a PhD in public health, from the National Institute of Public Health in Mexico.

Daniel Salas

Costa Rica | Minister of Health

Daniel Salas is the minister of health of Costa Rica. He has served as surveillance coordinator of noncommunicable diseases and has held management positions at the Education, Nutrition, and Child Comprehensive Care Centers (CEN-CINAI). He was also the national coordinator for the Expanded Program on Immunization, for the Surveillance for Immunopreventable Diseases, the Surveillance of Pesticide Poisoning, and the Preparation Commission Influenza Pandemics. He also served as technical secretary of the National Vaccination Commission, acting director of the Ciudad Quesada Health Area, and the Aguas Zarcas Health Area. He was also a member of the Regional Strategic Health Development Unit.

Jaime Sepúlveda

Mexico | Haile T. Debas Distinguished Professor of Global Health, Executive Director, Institute for Global Health Sciences

Jaime Sepúlveda is a global health leader dedicated to social justice and the well-being of poor people everywhere. Prior to his current post, he was a senior fellow at the Bill and Melinda Gates Foundation and member of the executive team, helping to shape the foundation's overall global health strategy. In Mexico, he served as director of the National Institute of Health, director general of the National Institute of Public Health, and vice minister of health (1991-1994). Sepúlveda founded the National Vaccination Council and the National Council for the Prevention and Control of AIDS. He is credited with modernizing the National Epidemiology Surveillance System, creating the National Health Survey System, negotiating a multimillion-dollar credit allocation to increase health coverage for the poor and to support the national health care services, and helping to secure funding for the GAVI Alliance immunization initiatives. He chaired the Institute of Medicine committee to evaluate President Bush's Emergency Plan for AIDS Relief in 2003.

Donna Shalala

United States | Former Representative for Florida's 27th Congressional District, Former Secretary of Health and Human Services

Donna Shalala was the assistant secretary for policy development and research in the United States Department of Housing and Urban Development during the presidency of Jimmy Carter, president of Hunter College and chancellor of the University of Wisconsin-Madison from 1988 to 1993. For eight years she served as the secretary of health and human services of the United States under the presidency of Bill Clinton. Shalala was president of the University of Miami from 2001 to 2015. She has also been senior lecturer in Political Science and Health Policy at the University of Miami and president of the Clinton Foundation.

Hugo Sigman

Argentina | Founder and CEO of Grupo Insud

Hugo Sigman is medical doctor of the Universidad de Buenos Aires, and founder and CEO of Grupo Insud, a business group with presence in the fields of pharmaceuticals, agroforestry, cinema, nature, and design. He served as chief of residents and director of the Psychiatric Emergency of Policlínico Lanús. He worked at the Psychiatry Service of Hospital Clínico de Barcelona. In 2011, Sigman founded, together with other renowned biotechnology companies, the Argentine Chamber of Biotechnology, with the aim of strengthening the public-private collaboration policy in biotechnology and encourage its development in the region. The Public-Private Consortium for Research and Development of Innovative Oncology Therapies developed the first therapeutic vaccine against lung cancer, Racotumomab (Vaxira), introduced in 2013.

Juan Gabriel Valdés

Chile | Former Minister of Foreign Affairs

Juan Gabriel Valdés was minister of foreign affairs of the Republic of Chile (1999- 2000), ambassador of Chile to the United States from 2014 to 2018. He previously served as ambassador and permanent representative of Chile to the United Nations and ambassador of Chile to the Republic of Argentina and the Kingdom of Spain. From 2004 to 2006, he was the special representative of the Secretary General of the United Nations and chief of the United Nations Mission MINUSTAH in Haiti. Valdés holds an MA in Latin American Studies at the University of Essex, England, and a PhD in Political Science from Princeton University, and has been a research fellow at Princeton University and at Notre Dame Kellogg Institute of International Relations. Since 2010, he has been a consultant for the Economic Commission for Latin America, (ECLAC) of the United Nations and of CAF, Development Bank for Latin America. Valdés is a member of the board of the Global Leadership Foundation and of the Center for International Conflict Resolution (CICR) at Columbia University.

Joel Velasco

Brazil | Senior Vice President, International Relations, Head of Latin America, UnitedHealth Group

Joel Velasco is senior vice president for international relations at UnitedHealth Group, overseeing external affairs efforts across Latin America, with a presence in Brazil, Chile, Colombia, and Peru. He is responsible for UnitedHealth Group's strategic development and management of multifaceted advocacy efforts; public policy and thought leadership development; government and business development opportunities; and social responsibility - as well as philanthropic initiatives- in Latin America. Velasco joined UnitedHealth Group in February 2019. He served previously as a principal of Albright Stonebridge Group, where he led the firm's Latin America practice, and at Amyris, an industrial biotechnology start-up, where he managed external relations, including investor relations and public affairs. Earlier in his career, he served as a senior advisor to the U.S. ambassador to Brazil and as a personal aide to vice president Al Gore at the White House. He received his M.A. from Georgetown University's School of Foreign Service and a B.A. in Political Science from Hampden-Sydney College in Virginia. He speaks English, Portuguese, and Spanish.



María Eugenia Vidal

Argentina | Former Governor, Province of Buenos Aires

María Eugenia Vidal is an Argentine politician and governor of the province of Buenos Aires from 2015 to 2019. She was the first woman to hold this office and first non-Peronist elected for the post since 1987. A member of the PRO party and Cambiemos coalition, Vidal was previously deputy mayor of the City of Buenos Aires, serving alongside former president Mauricio Macri during his tenure as mayor. She also served as minister of social development for the city. Vidal was elected to the Buenos Aires city legislature in 2007 and has worked in several organizations in the public sector, including ANSES, the social security administration, as well as the Ministries of Social Development and Foreign Relations.

Ernesto Zedillo

Mexico | Director, Yale Center for the Study of Globalization, Chair Emeritus, Inter-American Dialogue, Former President of Mexico

Ernesto Zedillo is the director of the Yale Center for the Study of Globalization; professor in the Field of International Economics and Politics; professor of International and Area Studies; and professor adjunct of Forestry and Environmental Studies at Yale University. He served as president of Mexico from 1994-2000. In August of 2020, he was invited to join the Independent Panel on Pandemic Preparedness and Response, mandated by the World Health Assembly to analyze the Covid-19 pandemic's early emergence, global spread, health, economic and social impacts, how it has been controlled and mitigated, and to support the international community by making recommendations for now and in the future. He is a member of The Elders, an independent group of global leaders using their collective experience and influence for peace, justice and human rights worldwide and is chairman of the Rockefeller Foundation Economic Council on Planetary Health. He serves on the Global Commission on Drug Policy; the Kofi Annan Commission on Elections and Democracy in the Digital Age; the United Nations High-level Advisory Board on Economic and Social Affairs; and on the Selection Committee of the Aurora Prize for Awakening Humanity and the Hilton Humanitarian Award. Formerly he served as chair of the Board of the Natural Resource Governance Institute and co-chair of the Inter-American Dialogue.

Inter-American Dialogue

Michael Shifter

United States | President, Inter-American Dialogue

Michael Shifter has been president of the Inter-American Dialogue since 2010 and was previously vice president for policy. Since 1994, Shifter has played a major role in shaping the Dialogue's agenda, commissioning policy-relevant articles and reports as well as implementing the organization's program strategy. Prior to joining the Dialogue, Shifter directed the Latin American and Caribbean program at the National Endowment for Democracy and the Ford Foundation's governance and human rights programs in the Andean region and Southern Cone.

Kaitlyn Blansett

United States | Coordinator, Development & External Relations, Inter-American Dialogue

Kaitlyn Blansett joined the Inter-American Dialogue in 2019 as a coordinator for Development and External Relations. She graduated from Indiana University in Bloomington with a BA in Spanish and History.

Heidi Botero

Colombia | Technical Associate, Inter-American Health Task Force, Inter-American Dialogue

Heidi Botero is an economist with 15 years of experience in international relations, with an emphasis on multilateral negotiations on global health policy. She worked worked as a policy officer in the WHO Department of Access to Medicines in Geneva, and as a consultant for Management Sciences for Health in Washington D.C. Previously, she worked in the Ministry of Foreign Affairs of Colombia for 12 years, where she served as coordinator of economic affairs and later on as health attaché in the Colombian Mission before WHO in Geneva. From that position, she was coordinator of the Group of the Americas and chair of various resolutions on access to medicines, global vaccine plan and the health dimension of the world drug problem.

Ariel Fiszbein

Argentina | Director, Education Program, Inter-American Dialogue

Ariel Fiszbein is the director of the Education Program at the Inter-American Dialogue. Prior to joining the Dialogue, Fiszbein was chief economist for the World Bank's Human Development Network, where he has helped develop strategies for work worldwide on education, health, nutrition, population, social protection, and labor. Fiszbein has over 20 years of experience working on education and other social policy issues in Latin America and globally. A native of Argentina, he has a PhD in economics from the University of California, Berkeley.

Denisse Yanovich

Colombia | Deputy to the President, Director of Development, External Relations & Special Projects, Inter-American Dialogue

Denisse Yanovich is the deputy to the president, director of development, external relations and special projects at the Dialogue. She has more than 15 years in public affairs, project management and development experience in both the private and public sectors. Yanovich was recently a consultant for The Fratelli Group and the Woodrow Wilson International Center for Scholars in Washington DC, and she led the Investor Relations team at Efromovich/Silva Capital Partners, a Latin American private equity firm headquartered in Bogota. Before that, she was counselor at the Embassy of Colombia in Washington DC, where she was responsible for developing and managing Colombia's Public Diplomacy program in the United States. Yanovich earned a BA and MA in Economics from the Universidad de los Andes, Bogota, and an MA in Art History from the Courtauld Institute of Art, University of London.



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