**Establishing the value of regional cooperation and a critical role for regional organizations in managing future health emergencies**

Afifah Rahman-Shepherd (MSc)1, Nelson Aghogho Evaborhene (MSc)2, Ayelet Berman (PhD)1,3,4,Ana B. Amaya (DrPH)5,6, Ezekiel Boro (MD)7, Osman Dar (MSc)8, Zheng Jie Marc Ho (MPH)3,9, Anne-Sophie Jung (PhD)10, Mishal Khan (PhD)11,12, Olaa Mohamed-Ahmed (MSc)6, Oyeronke Oyebanji (MSc)13, Tikki Elka Pangestu (PhD)14, Sabina Faiz Rashid (PhD)15, Ahmed Razavi (MPhil)16, Pía Riggirozzi (PhD)17, Helena Legido-Quigley (PhD)1,3,18\*, Li Yang Hsu (MPH)1,3\*

1 Saw Swee Hock School of Public Health, National University of Singapore, Singapore

2 Faculty of Health Sciences, University of the Witwatersrand, South Africa

3 Asia Centre for Health Security, Singapore

4 Centre for International Law, National University of Singapore, Singapore

5 Health Science Department, College of Health Professions, Pace University, United States

6 Institute of Comparative Regional Integration Studies, United Nations University, Belgium

7 Liverpool School of Tropical Medicine, United Kingdom

8 UK Health Security Agency, United Kingdom

9 Interim Communicable Diseases Agency, Ministry of Health, Singapore

10 School of Politics and International Studies, University of Leeds, United Kingdom

11 London School of Hygiene and Tropical Medicine, United Kingdom

12 Aga Khan University, Pakistan

13 Coalition for Epidemic Preparedness Innovations, United Kingdom

14 Yong Loo Lin School of Medicine, National University of Singapore, Singapore

15 James P Grant School of Public Health, BRAC University, Bangladesh

16 UK Health Security Agency, Indonesia

17 Global Health and Policy Centre, University of Southampton, United Kingdom

18 George Institute for Global Health and Imperial College, United Kingdom

\* Joint last authors.

Corresponding author: Afifah Rahman-Shepherd ([Afifah.rahmanshepherd@u.nus.edu](mailto:Afifah.rahmanshepherd@u.nus.edu), +65 83361765), Saw Swee Hock School of Public Health, 12 Science Drive 2, #10-01, Singapore 117549

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**Summary**

The COVID-19 pandemic laid bare the failures of global multilateral cooperation to respond and adapt whilst observing the principles of solidarity and equity. It has raised the question of whether the global architecture for health emergencies is fit-for-purpose and revealed the need for reform. Amidst proposals to reform this architecture, we consider the potential value of regional cooperation and the role regional organizations might play in delivering effective and equitable solutions to the challenges posed by health emergencies. Drawing on our multidisciplinary perspectives and diverse experience of geographic regions, we conducted a narrative review and present our key findings in four sections that explore the value of regional cooperation, the role of regional organizations, where they may have the greatest impact, and the major factors affecting regional cooperation and regional organizations in managing public health emergencies. As the COVID-19 pandemic reshapes our approach to health emergencies, leveraging and integrating the capabilities of regional organizations will be crucial to enhance preparedness and response efforts globally.

**Introduction**

Since the COVID-19 pandemic emerged, there has been stronger and wider recognition of the value of regional cooperation and the role regional organizations play in managing public health emergencies.

The body of recommendations on reforming the global architecture for health emergencies, from both high-level reports and recent literature, underscore the need for regional capabilities to counter risks of future pandemics. In 2023, the Independent Panel for Pandemic Preparedness and Response released a roadmap of reforms to better protect the world from pandemic threats. The Panel recognized regions as increasingly strong political platforms with collaborative and technical capabilities, and the roadmap establishes a clear role for regions in managing health emergencies. The Global Preparedness Monitoring Board released a Monitoring Framework, also in 2023, which includes, for the first time, indicators to track prevention, preparedness, and resilience at the regional level – an important step toward investing in regional cooperation and capabilities.

Despite this growing recognition, there is relatively little research on the role of regional organizations in global health broadly, and in public health emergencies specifically. 1 We explore this research lacuna as a group of multidisciplinary researchers with diverse experience of geographic regions, aiming to develop a better understanding of regional cooperation and the role of regional organizations in managing public health emergencies.

**Study design and methodology**

To address this aim, we conducted a narrative review. This approach allowed us to adopt a subjectivist paradigm, harnessing our collective perspectives to critically engage with and synthesize relevant theories, policies, and literature on the topic. 2 Our authorship integrates perspectives from epidemiology, outbreak investigation and control, health policies and systems, global health and One Health, international relations, and international law. Though multidisciplinary, we acknowledge that our public health centricity and predominantly research backgrounds shape the interpretations and analysis presented in this review.

Wang et al (2024) define regional organizations as ‘institutionalized forms of cooperation between three or more states based on geographical criteria, concerning more than one specific issue, with a set of primary rules and a headquarters or secretariat’. 3 We adopt this definition because it recognizes the region as a space in which states formally interact with one another, and a role for regional organizations in facilitating such cooperation. It focuses our scope on regionally owned state-based membership organizations that are defined by a certain geography and have a policy position on health. We thus consider regional offices of United Nations or other global agencies to fall outside the scope of this definition, as their mandate is shaped by global governance processes beyond the region itself. Whilst these criteria align with our aim, it may overlook the importance of regional offices in managing health emergencies, as well as other regional organizations in adjacent fields, such as animal and wildlife health, climate change, and humanitarian crises.

To first establish our own views, we developed a standardized set of questions to explore the value of regional cooperation and the role of regional organizations in managing public health emergencies, including which regional organizations played a key role in the COVID-19 pandemic; where regional organizations might have the greatest impact; and the major factors affecting regional cooperation and regional organizations. Based on key concepts and themes emerging from the analysis of our collective responses, we conducted the narrative review. Search terms and related terminology included ‘global health governance’ and the governance architecture for health emergencies; ‘regionalism’ in terms of health cooperation; and ‘regional organizations’, their role and contributions in public health emergencies, specifically the COVID-19 pandemic. The review was an iterative process, involving multiple cycles of searching, synthesis, and interpretation as concepts were further clarified and discussed with the research team. 2 A detailed methodology is provided in the Appendix (p.1-2).

We present the findings as a narrative synthesis, integrating findings from the thematic analysis and narrative review in four sections that address the value of regional cooperation, the role of regional organizations, where they may have the greatest impact, and the major factors affecting regional cooperation and regional organizations in managing public health emergencies.

**What is the value of regional cooperation in managing public health emergencies?**

Despite the COVID-19 pandemic being a common threat to all states, there was a severe lack of political commitment and accountability to cooperate through global channels. Cooperation at the global level is inherently challenging given the multitude of actors involved and complexity of issues concerning them. There are 194 member states of WHO and countless non-state actors also involved. This introduces major areas of conflict in interests and motives between Global North and Global South, and between public and commercial partners. New global institutions and instruments proposed in the wake of the pandemic will not necessarily solve these challenges, since the arena for such cooperation is still shaped by a prevailing geopolitical hegemony and power hierarchies. 4,5 Persistent opposition primarily from high-income countries on key equity issues in the proposed Pandemic Agreement, such as access to information, data, and technology during a health emergency, demonstrate these dynamics very clearly, delaying the negotiations. 6

The regional level, on the other hand, could be a more conducive environment for cooperation, not least because there are fewer state and non-state actors involved, but because common goals and problems may be better defined. Many regional organizations first emerged from recognizing that neighbouring states have much in common beyond their shared borders: they have shared histories, economies, cultures, language, and identities. Neighbouring states also share ecosystems that give rise to a common set of risk factors for emerging and re-emerging infectious diseases. It is these commonalities that reduce the barriers to cooperation and have enabled states to pursue common goals and interests with clear benefits in terms of leveraging collective capabilities and resources. 7–9 Cooperation is also increasingly necessary as certain issues, such as those related to health, migration, and the environment, are often intensified or shaped by regional developments and interactions. 10

The value of regional cooperation may also be explained by the principle of subsidiarity. The global architecture for health emergencies is multilevel with actors operating within and across the national, regional, and global levels. The principle of subsidiarity optimizes this architecture by requiring the appropriate allocation of decisional authority across levels, taking a bottom-up approach. 11 If the local level is unable to solve a problem by itself, such is often the case in public health emergencies, a higher level may step in to provide support. Rather than default to the global level as the higher level, we argue the regional level can foster solutions that are more contextually appropriate and adequate. 12 Regional actors are more attuned to the realities of states in their region: they have greater familiarity and knowledge of the epidemiological dynamics, the health system capabilities amongst member states, and the social, economic, and political contexts.

Lastly, the value of regional cooperation may be explored through an equity lens. In trade, it has been argued that regionalism deals with fairness more effectively than multilateralism, because regional approaches can increase the negotiating power and voice of states typically marginalized in global multilateral processes. 13 The same may be true in health. Regional cooperation can provide the platform and mechanisms by which to strengthen the position of low- and middle-income countries (LMICs) internationally. 7–9 In negotiating the Pandemic Agreement, for example, the Africa CDC, which advises African negotiators, adopted a Common Africa Position that emphasized equity in terms of pathogen access and benefit sharing, and sustainable and geographically diversified investments in producing countermeasures. 6

**What is the role of regional organizations in managing public health emergencies?**

Health was not a major focus of regional organizations until the 1990s, when there was a significant increase in the number of regional organizations with a policy position on health. 1,3 Scholars have attributed this to the rise in socioeconomic inequalities, including health disparities, following an extensive period of globalization and neoliberal policy regimes. 3 Public health crises, particularly outbreaks of emerging or re-emerging infectious diseases, have also catalyzed regional efforts to facilitate health cooperation. Between 2003 and 2015, a series of outbreaks in Asia motivated the Association of Southeast Asian Nations (ASEAN) to develop regional mechanisms to prevent, prepare for, and respond to public health emergencies, such as the ASEAN Emergency Operations Centre Network. Similarly, in the wake of the Ebola outbreaks in West Africa in 2014, the AU established the Africa CDC.

The ways in which regional organizations responded to gaps in the global response to the COVID-19 pandemic signaled a shift in leadership, ownership, and decision-making for health emergencies. When the COVID-19 Vaccines Global Access (COVAX) Facility did not provide equitable and timely access to COVID-19 vaccines worldwide, several regional organizations stepped in to support member states. In late 2020, the AU charged the African Vaccine Acquisition Task Team (AVATT) with coordinating vaccine access and financing for the continent, working with both the COVAX Facility and directly with vaccine manufacturers. The Caribbean Public Health Agency (CARPHA) mobilized funds to assist seven member states with the downpayment required to participate in the COVAX Facility, coordinating with the EU and the Pan-American Health Organization. In Southeast Asia, ASEAN finalized its Vaccine Security and Self-Reliance initiative, accelerating progress toward regional procurement and stockpiling of vaccines. By mobilizing to close these gaps, regional organizations demonstrated a role for themselves in managing health emergencies, leveraging political, financial, and technical resources to address regional needs and priorities.

Whilst it is too early to tell how the COVID-19 pandemic will re-shape the global governance architecture for health emergencies, it seems to have triggered the expansion of regional spaces for health cooperation. Since the pandemic, the Gulf Cooperation Council established the Gulf CDC; the European Union (EU) established the Health Emergency Preparedness and Response Authority (HERA); the ASEAN announced the Centre for Public Health Emergencies and Emerging Diseases (ACPHEED); and the AU elevated the Africa CDC to an autonomous public health agency. More recently, there have also been calls to establish a Latin American Regional CDC to facilitate greater regional cooperation and work towards a more resilient regional health infrastructure. 14 This supports the view that the region, and regional organizations in particular, provide a policy space able to compensate or to challenge some aspect of global governance when that fails to resolve collective problems. 13 We might anticipate then that regional organizations continue to consolidate in the wake of the pandemic, offering states a solution to managing complex, transnational crises in the absence of effective and equitable global multilateral cooperation. 4,13

**Where would regional organizations have the greatest impact in managing public health emergencies?**

To optimize the multilevel system of governance for health emergencies, clear roles and responsibilities should be delineated across levels to leverage their comparative advantages. We propose a set of capabilities that regional organizations could strengthen to further enhance their role at a regional level, as well as across levels. Examples of regional organizations operationalizing these capabilities are presented in Table 1.

Regional organizations provide a space for states to convene, establish priorities for collective action, and formulate regional strategies, frameworks, and mechanisms that address their needs. Many regional organizations are defined by more than one issue and are thus able to convene representatives from different sectors of government in cross-sectoral forums. Channels for communication and coordination among states, as well as with key regional and international partners, are essential. Regional organizations also provide a bridge between the global and national levels, facilitating interlevel cooperation and partnerships, as well as contextualizing global policies or guidelines at a regional level. 7 Regional organizations often have a better understanding of the level of resource availability amongst their member states and the implementation approaches that would be acceptable in their context, and can thus coordinate political, financial and technical support accordingly.

There are several challenges to building cross-border surveillance systems, such as the absence of a legal framework to enable cross-border data sharing; the rapid authorization required to share time-sensitive information; the concerns surrounding data security and privacy; the interoperability of existing surveillance and IT systems; and the lack of trust between different partners. 8 Whilst mechanisms such as the Africa CDC’s Regional Integrated Surveillance and Laboratory Network and the ASEAN Emergency Operations Center Network demonstrate the potential to regionalize surveillance capabilities, the extent to which they have encountered (and overcome) these challenges is unclear. Nevertheless, regional organizations could establish common legal and technical infrastructure to harmonize and standardize surveillance across countries; and become a hub for states to share and access information, knowledge, expertise and best practices within the region.

Regional organizations can also consider pooling, sharing, and coordinating deployment of specialized human resource capabilities within the region, particularly since many regional blocs already have provisions for free movement of people. Regional outbreak investigation and rapid response teams would be better equipped to understand and navigate the epidemiological context of an outbreak and the affected communities. Regional organizations can thus develop the necessary agreements and protocols to institutionalize these teams at a regional level.

Regional organizations are particularly well positioned to manage pooled procurement mechanisms. Regional organizations were able to negotiate more favourable purchasing agreements on behalf of their regions. Whilst the United Kingdom, United States and Israel reportedly paid $19.20, $19.50 and $30 per dose of the Pfizer/BioNTech vaccine respectively, the EU paid $14.70. 15,16 Importantly, pooled procurement can often increase the negotiating power of smaller or lesser resourced countries by aggregating demand, thereby driving down costs. 7 The AU, for example, reportedly paid $6.75 per dose of the Pfizer/BioNTech vaccine. 17 However, for high-income countries that secured bilateral procurement deals, it also secured their place in the vaccine queue, and often prohibited exporting or even donating vaccines without the manufacturer’s permission. By November 2020, high-income countries representing less than 14% of the world’s population had secured more than 50% of the first 7.5 billion doses. 18 Regionalizing pooled procurement is thus insufficient alone to disrupt the global political and economic order that entrenches inequitable access to health technologies.

To achieve more equitable outcomes in the next pandemic, regional capacity-building, technology, and know-how transfer must be prioritized. During the COVID-19 pandemic, mechanisms such as compulsory licensing under the Agreement on Trade-Related Aspects of Intellectual Property Rights and the COVID-19 Technology Access Pool largely failed to secure patent waivers and technology transfer. 18 The current system of producing health technologies is deeply inequitable, driven and protected by pharmaceutical monopolies and a handful of powerful, high-income countries that reinforce a global intellectual property regime. 18 Regional organizations can play a vital role in establishing regional research and development hubs and the necessary governance, financial, and technical infrastructure to reduce dependencies across Latin America, Africa, and Asia. 19 This may include exploring market protection policies, agreements for material and technology transfers, strengthening supply chains and manufacturing capabilities, establishing regulatory standards and approval processes, and supporting social science research alongside clinical and biomedical research.

**What are the factors affecting regional cooperation and regional organizations?**

We identified diverse factors that might affect regional cooperation and the functioning of regional organizations, and find that these factors can act as either an enabler or barrier depending on the circumstances. We have developed a conceptual framework in Figure 1 to visualize these factors.

***Global and regional power relations*** The broader geopolitical context at global and regional levels can significantly hamper cooperation. The withdrawal of Argentina from regional trade negotiations and the downplaying of the pandemic by President Bolsonaro in Brazil fractured regional solidarity, limiting the ability of the Southern Common Market (Mercosur) to coordinate a regional response to the COVID-19 pandemic. 20 In South Asia, whilst the pandemic reinvigorated the South Asian Association for Regional Cooperation (SAARC) and led to the SAARC COVID-19 Emergency Fund for example, India’s dominance in the region and hostilities between India and Pakistan prevented more concrete cooperation. 21 These examples illustrate a few interrelated barriers. First, the impact of destabilizing or dominant states on the functioning of regional organizations. Just as there is a global geopolitical hegemony that regional organizations need to navigate, the same can be true at a regional level. Second, the lack of political interest and trust between states to participate in and sustain regional cooperation mechanisms, whether on health or other issues. This might be explained by a third barrier, which is the limited value that states place in these regional organizations to effectively manage collective problems.

Real or perceived competition between different actors for decisional authority and resources at a regional level, particularly given finite and often insufficient financing for health emergencies, may also affect cooperation. For instance, when the AU sought to expand Africa CDC’s mandate to declare a public health emergency of continental security, this was met with reluctance from the WHO Regional Office for Africa. The Regional Office was concerned by the deviation from current protocol, and the confusion and duplication this might create. 22 The implications of declaring public health emergencies at a regional level are explored further in the Appendix (p.3). Competition may also be exacerbated by the many regional organizations that exist, often with overlapping mandates and membership. For example, in Africa alone, there are two regional public health organizations and two WHO Regional Offices; at least eight regional economic communities; one regional development bank and at least four sub-regional development banks; and numerous non-state regional organizations, networks, and initiatives. This poses a significant coordination challenge, and risks fragmenting the regional architecture for managing health emergencies.

Industry opposition to the first mRNA vaccine technology transfer Hub in South Africa also illustrates the potential competition for decisional authority and resources at regional (and sub-regional) levels, but from non-state actors. A consultancy company hired by BioNTech recommended for the Hub to be immediately terminated. 23 The Hub at Afrigen went on to successfully develop a COVID-19 vaccine using publicly available data in the Medicines Patent Pool and shared this know-how with 15 LMICS in a concerted effort to strengthen R&D and manufacturing capabilities in other regions.

***Equitable partnership-building*** Partnerships can be a way to unlock financial and technical resources that can be pooled and efficiently distributed across the region. To secure COVID-19 vaccines for the continent, AVATT brought together the Africa CDC, the African Export-Import Bank, the AMSP, the UN Economic Commission for Africa, the World Bank, and UNICEF to sign an advanced procurement agreement with Johnson & Johnson for 220 million COVID-19 vaccines. It marked the first time that AU member states collectively purchased vaccines. Regional organizations are well positioned to bring together state and non-state actors within the regional level, as well as across levels, to achieve common goals through equitable decision-making and resource sharing. Regional organizations are also well positioned to explore opportunities for inter-regional cooperation, as a mechanism to negotiate greater regional representation in global governance processes.

***Organizational leadership and governance*** Although the regional space for cooperation on public health emergencies is expanding, this is still a relatively new space for most regional organizations and questions of legitimacy and credibility may surface. Do states see regional organizations as legitimate stewards and a credible authority in managing public health emergencies? Additionally, do global actors see regional organizations as legitimate and credible counterparts? Any doubt cast on either the legitimacy or credibility of a regional organization can impede efforts to regionalize pandemic capabilities. Establishing robust leadership structures that promote good governance, such as minimum requirements for leadership positions, term limits, transparent election processes and appropriate oversight mechanisms, will be critical for regional organizations to be seen as a valid and trustworthy vehicle for cooperation. 24

Regional organizations often construct a regional identity that reinforces a sense of solidarity among states. During the COVID-19 pandemic, the EU referred to a Team Europe approach based on joint priorities, joint financial packages, support for global preparedness, and support for global coordination and multilateralism. The Team Europe approach, in many ways, promoted European integration on broader development policies and positioned the EU as a key global health actor with significant political and financial resource. The Africa CDC also called for a New Public Health Order in which ‘Africa must stand up, Africa must unite, and Africa must put in place the necessary systems for it to safeguard the health of its people’. 25 This resonates with some of the norms of Pan-Africanism, which was crucial in the unification of Africans against colonialism, and has been instrumental in mobilizing political, financial, and technical support from member states, as well as other regional and international partners. Regional identity-building and evoking a ‘we feeling’, particularly during cross-border crises, can be a powerful motivator of collective action. 26

It is important to highlight here that the ability of a regional organization to act independently in the collective interest of its member states is determined by member states themselves, and their willingness to empower the wider organization. Hence, the extent to which the organization can effectively manage public health emergencies in the region varies, depending on how representative the organization is of the region itself, its internal governance arrangements, and cooperation norms that states themselves agree to.

***Sustainable financing*** Adequate financing for regional organizations is undoubtedly a key factor. Many regional organizations, as well as networks and initiatives, across Latin America, Africa, and Asia are externally funded. Amongst the top sources of funding for Africa CDC, for example, are the governments of the US and China, the World Bank, the EU, the Gates Foundation and the MasterCard Foundation. Funding from Global North donors tends to prioritize investments in infectious diseases without meaningfully engaging Global South recipients as partners, to understand their health priorities and address the broader health system needs. 27 Whilst regional organizations do receive contributions from member states, these contributions should be sufficient and sustainable to reduce external dependencies and support regional ownership. 7 In the case of operationalizing ACPHEED, for example, whilst the governments of Japan and Australia have already pledged a total of US$65 million, it is yet unclear the proportion of resources that will be mobilized from within ASEAN to sustain its operations. 28

Many of the financing-related recommendations from the COVID-19 pandemic have advocated stronger links with regional development banks. Early in the pandemic, the African Export-Import Bank launched the Pandemic Trade Impact Mitigation Facility to help prevent trade debt payment defaults for member states, and ensure the continuation of trade under emergency conditions. The Development Bank of Latin America in fact surpassed the World Bank as the leading provider of COVID-19 financing in the region. Regional organizations could better cooperate with regional (and sub-regional) development banks to consolidate and coordinate financing for pandemic capabilities, especially for surge response. For example, with funding from the Pandemic Fund, CARPHA has partnered with the Inter-American Development Bank to strengthen integrated early warning surveillance, laboratory systems, and workforce development. Though there were other multi-country proposals awarded, this was the only proposal submitted by a regional public health organization.

**Recommendations for regional organizations moving forwards**

Our synthesis leads us to propose three recommendations for regional organizations. First, to convene and coordinate equitable partnerships that enhance cooperation at a regional level, as well as across levels. Partnerships should engage both state and non-state actors, harnessing their respective capabilities and resources toward achieving common goals. Partnerships that bridge levels may also enable regional organizations to better integrate the regional architecture into the global architecture for managing health emergencies. Building longer-term relationships hinged on mutual respect and trust should be a priority to maintain relations in peacetime, ready to mobilize in an emergency.

Second, to construct a regional identity and facilitate identity-building efforts that reinforce a sense of solidarity amongst member states. This may foster more cohesive and resilient multilateral relations that, during a health emergency, could provide a buffer against larger geopolitical tensions at regional or global levels.

Third, to establish robust decision-making processes with clear duties assigned to member states that underpin the organization’s leadership, and adhere to the principles of good governance, particularly transparency and accountability. This is important for regional organizations to demonstrate their legitimacy and credibility as platforms and as partners for cooperation in health emergencies. It is also necessary if regional organizations are to seek more reliable and sustainable resourcing (financial, human, and technical) from their member states and partners.

Whilst these recommendations seek to consolidate the major enablers of regional cooperation, they do not necessarily mitigate the major barriers. For instance, establishing robust decision-making processes that are embedded in transparent and accountable governance does not guarantee that member states mandate the organization greater autonomy. Regional organizations will need to navigate the dynamics of enablers and barriers of regional cooperation in their respective contexts. We also recognize the dearth of literature empirically evaluating regional cooperation and the role of regional organizations in managing health emergencies. As this body of literature grows, and is contributed to by regional organizations themselves, so too should the recommendations to guide and inform their operations.

**Conclusion**

Managing outbreaks when and where they occur, more equitably and effectively than before, requires a more agile system of decision-making and increased investment in regional preparedness and response infrastructure. Whilst regional spaces are expanding, the challenge will be how these spaces are integrated into the global architecture for health emergencies to optimize a multilevel system of governance. Alongside the recommendations we propose, there is a need to empirically evaluate the role of regional organizations in managing public health emergencies and generate a robust evidence base that regional organizations, their member states, and their regional and international partners can operationalize. Though there are important barriers to address, strengthening regional cooperation and developing regional capabilities can achieve a level of self-sufficiency and resilience whereby regions are fully capable of managing health emergencies in ways that are responsive, practicable, effective and sustainable in their contexts.

**Table 1:** Examples of regional organizations operationalizing key capabilities in response to COVID-19

**Figure 1:** A conceptual framework of factors affecting regional cooperation

**Authors’ Contributions**

AR-S conceptualized and designed the study, including developing a standardized set of questions for data collection. HL-Q reviewed the study design. All authors responded in writing to the questions except for AR and PR. AR-S was responsible for data curation and formal analysis of the complete dataset. HL-Q reviewed the dataset. AR-S prepared an outline of the manuscript, which HL-Q and NAE reviewed and provided feedback. AR-S prepared the original draft of the manuscript, which all authors reviewed. AR-S edited the manuscript to produce the final draft, which was shared and approved by all authors before submission.

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