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Hospital contingency in coping with COVID-19 in Brazil: governmental problems and alternatives

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Abstract *This paper analyzes the government's strategic agenda for coping with COVID-19 in Brazil, focusing on hospital care. Twenty-eight Contingency Plans were analyzed in full, one national, 26 at state level, and one from the Federal District. The Public Policy Cycle's theoretical framework was used, specifically governmental pre-decision and decision to face the pandemic. The evidence revealed convergences between the national and state levels concerning proposals for reorienting care flow, detecting cases, and indicating referral hospitals. However, the state agendas revealed weaknesses in acquiring mechanical ventilation devices, sizing human resources, and regionalizing hospital care. Moreover, few states have established a method for calculating back-end beds, mainly regarding the outlook of opening hospitals of reference or contracting additional ICU beds. We can conclude that the heterogeneous actions explained in the plans show the complex process of coping with COVID-19 in Brazil with its regional inequalities, weaknesses in the state health systems, and reduced coordination by the Ministry of Health.*

Key words *Coronavirus, Unified Health Systems, Hospitals, Hospital Bed Capacity, Contingency Plans*

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Introduction

On December 12, 2019, the new coronavirus was notified in Wuhan, the Chinese province of Hubei. It achieved a high degree of transmissibility that led the World Health Organization (WHO) to declare Public Health Emergency of International Concern (PHEIC) on January 30, 2020, according to International Health Regulations (IHR)[1]. The pandemic condition was declared on March 11, alerting member countries to strategies for controlling the transmission of the virus and organizing the health systems with the structuring of the hospital back-end for severe cases of the disease, following recommendations of the strategic plan of preparation and operational response explaining planning guidelines to support the preparedness and response of countries around the world[2].

Thus, the rapid cumulative incidence of COVID-19 can cause overuse of health systems, especially hospital services and their Intensive Care Units (ICU) beds, suggesting the formulation of contingency plans and strategies and actions to contain the progress of the disease, reinforcing the surveillance system and actions to prevent and control the pandemic[3-5].

The international scientific literature on hospital contingency points to challenges related to the scarcity of beds and supplies[6,7], impacts on the care network, which requires increasing the installed capacity[8], opening field hospitals[9], and recruiting care back-end personnel[10,11].

In Brazil, the Public Health Emergency of National Concern (PHENC) was declared on February 3, with simultaneous activation of the Emergency Operations Center (COE) in Public Health for the new Coronavirus[12]. The National Contingency Plan (PCN) recommended priorities to guide the investment of resources[13]. Similarly, the States and the Federal District (DF) presented their priority strategies for facing the pandemic in the respective State Contingency Plans (PCE). Thus, this study aimed to analyze the strategic governmental agenda for facing COVID-19 in Brazil, focusing on hospital care.

Theoretical-methodological procedures

This is documentary research that adopted the first Epidemiological Bulletin of the national COE and twenty-eight Contingency Plans (CP), namely, one national, 26 at state level, and one from the Federal District, to confront COVID-19 in Brazil, as its sources, focusing on hospital care in these management spheres. These instruments were precursors to formulating the COVID-19 Public Contingency Policy.

As an analysis plan, they were read in-depth to recognize the strategies defined by the governments[14], whose results were organized to present priorities by the federal and state spheres of health management[15,16], allowing triangulation with the reference formulation of the governmental agenda of the Public Policy's Cycle. Therefore, it focused on the theoretical structure of pre-decision and decision-making regarding the measures to be adopted to address COVID-19[16,17].

Three flows were considered to analyze this process of formulating public policies[16], namely, issues, policies, and politics. Issues can be evidenced by a real crisis that the government cannot ignore, like the COVID-19 pandemic. The second flow involves the analysis of the alternatives proposed to tackle the issues. The third refers to the political process of preparing and implementing the selected proposals[16].

These elements were central to the analysis of pre-decision and decision and discussion of results presented in state percentages of prioritization. To this end, the national agenda supporting the structuring of six categories of recommendations adopted for discussion with the state priorities for hospital contingency to COVID-19 in Brazil is presented. The standardized acronyms of the respective Brazilian states were adopted.

Results

The governmental pre-decision took place at the federal level to make recommendations in the face of the issue and the state level that built a technical-sanitary agenda to face COVID-19 in Brazil (policies). Thus, national pre-decision movements (politics) from the COE leadership will be presented, actors involved in the recommendations, and priorities defined at the state level of formulating the governmental coping with COVID-19 in Brazil.

National pre-decision-making movement for coping with COVID-19

An articulation between federal and state governments was established in the management of the SUS as of late January 2020[18], to define the alternatives to address COVID-19 in Brazil. The COE/MS[12] was an active forum for the unique

coordination of contingency for COVID-19, responsible for discussing coping measures (alternatives) to be adopted with subnational managers[12]. It was created by the Health Surveillance Secretariat (SVS) departments and through its Epidemiological Bulletin nº1[13]. It assumed coordinating, planning, and operationalizing logistics and finance of the national response plan and managing the Operations Command System (SCO) for the Public Health Emergency.

As a pre-decision summit, the week between COE's activation (January 22, 2020) and the PCN launch (January 28, 2020)[13] stands out. In this brief period, the PHENC was declared, the COE met with the National Council of Health Secretaries (CONASS), the National Council of Municipal Health Secretariats (CONASEMS), representatives of State Surveillance, and Central Laboratories, and the Interministerial Executive Group (GEI)[19] was established. The GEI is responsible for proposing, monitoring, and articulating coping measures, allocating budgetary resources, and monitoring emergency actions. The representation of the MS, Civil House, Ministries of Justice, Defense, Agriculture, Regional Development, Security Office of the Presidency, and the National Health Surveillance Agency[19] is provided for in its composition.

The proposed articulation between national governmental actors in decision-making prevailed when the agenda was being formulated. It aimed to coordinate institutions and establish technical-epidemiological competencies for interventions. It is worth mentioning the notoriety of the COE/MS spearheading the process of structuring the contingency plan for COVID-19 in Brazil in this first stage of the policy cycle. To this end, an agenda of national recommendations was defined to guide which priorities would be strategic in the state-level decision.

The national and state priorities for SES and MS coping with COVID-19 are mentioned next.

National priorities for public health emergency situation

Formulating a PCN was a considerable challenge for managers, especially in Brazil, given the regional inequalities and federative nature reproduced in the management of the Unified Health System[19].

The PCN's strategic agenda was structured around eight pillars: surveillance, laboratory support, infection control, care, pharmaceutical care, health surveillance, risk communication, and management strategies[13]. Moreover, the response levels determined were infection alert (high risk in suspected cases), imminent danger (with suspected case), and the PHENC[12].

Chart 1 summarizes the recommendations established by the PCN. The COVID-19 emergency network for hospital care should be defined based on it. Workers should be permanently educated for clinical management and individual protection, and the organization of the hospital network should be recommended as part of state contingency for containment. Concerning mitigation, it was recommended to have hospital care for severe cases, expand the supply of hospital beds due to the risk of exceeding the response capacity, and contract emergency ICU beds[12].

These recommendations allowed thinking of the contingency in six categories of national priorities to be addressed by the PCE, where an agenda for COVID-19 in Brazil should be established, considering: 1. Systematization of the care network; 2. Definition of an emergency network; 3. Orientation of hospital care to cases; 4. Hospital care for severe cases; 5. Expansion of hospital beds; 6. Emergency contracting of ICU beds.

Consequently, the PCEs pointed to seventeen state priorities, deployed or correlated with the six national ones, and it is essential to start presenting this agenda considering the Brazilian regional distribution of the PCEs. Table 1 shows the numbers of States and percentages of each of these priorities, reflecting on the Brazilian contingency to COVID-19.

Three national priorities stood out for including one of the state priorities in 100% of the PCEs: care network systematization, hospital care guidance, and hospital care for severe cases. Its main correlations in PCEs were establishing networks and regulatory flows for severe cases, clinical management guidance, and securing equipment, laboratory supplies, and PPE.

The second-highest percentage of state priority corresponds to the indication of referral hospital services with contingency reserve beds, which was specified by 20 PCEs (74.07%). The southern region had the lowest percentage in this priority.

Three state priorities formed a group with the third main percentage, and they are: counter-referral for care (33.33%), provision of the pre-hospital care network, and emergency plan or opening of field hospitals (both with 29.62%). They relate to national recommendations for systematizing the care network, the urgent care network, and the expansion of hospital beds.

Chart 1. Strategic agenda for each stage of the fight against Covid-19, according to the National Contingency Plan.

Containment Stage	Mitigation Stage
. Identify and prevent virus spread; . Conduct surveillance actions; . Check stock and purchase Personal Protective Equipment (PPE); . Orient home quarantine to suspected cases; . Record information for surveillance; . Alert the entire SUS health care network; . Prepare responses in the care network; . Define urgent and emergency care network; . Sensitize health professionals to detect suspected cases, adequate patient management, and PPE use; . Develop and divulge State Contingency Plans containing the organization of the hospital care network	. Avoid the occurrence of severe cases and deaths; . Recommend restrictive isolation and home quarantine measures for suspected and confirmed mild cases; . Provide hospital care for severe cases; . Expand hospital beds when there is a risk of exceeding the hospital's response capacity to care for severe cases; . Emergency contracting of ICU beds.

Source: National Contingency Plan for Human Infection by Covid-19, 2020.

However, the Brazilian regions with the lowest prioritization of these in the PCEs were Southeast (0.00%), Northeast (11.11%), and Midwest (25%) regarding the systematization of the care network; North (0.00%) and Southeast (25%) referring to the pre-hospital network, and North (14.28%) and Midwest (25%) correlated to the opening of field hospitals.

Organizing the network with complexity and regionalization levels was the priority in which all Brazilian regions had some state citing. However, it comprised only 25.92% of the PCEs, with just one state in the North, Midwest, and South.

Another set of priorities was not widely mentioned in the PCEs. The calculation of availability of beds and articulation of inter-federative support in the event of overcrowding in the hospital network were prioritized by 14.81% of the states and were not mentioned in the Southeast, South, and Midwest regions. The need for human resources for health was pointed out by 18.51% of the states and was not highlighted in the northern, midwestern, and southern regions. The implantation of reception with risk classification and support for hospital epidemiological surveillance centers was registered in 22.22% of the PCEs and not covered by those in the South, Southeast, and Midwest regions.

It is also worth mentioning that two priorities were not mentioned in any PCE, namely, the purchase of mechanical ventilation devices and private ICU beds' contracting for the back-end to severe COVID-19 cases (both with 0.00%).

These lower percentages of regional priorities correspond directly to the following national priorities: definition of the urgent care network, orientation to hospital care, care to severe cases, expansion of hospital beds, and emergency contracting of ICU beds. In such a way, it will be essential to analyze the state priorities further to characterize the establishment of the contingency agenda, precisely the elements that underpinned the PCE.

State priorities in the public health emergency situation

Therefore, state managers also had the critical task of designing solutions to face the pandemic, considering their territory's peculiarities and socio-political and cultural contexts. Thus, the elaboration of the PCEs aimed to strengthen the management of the state and municipal public health network and the services to reduce the complications and harm caused by COVID-19.

The state plans had multiple structures, with some recommendations converging to the national contingency. Noteworthy are priorities related to health surveillance, expansion and availability of beds and supplies, and health or continuing education for workers in the sector.

Regarding surveillance, the recommendations aimed at the early detection of flu-like syndromes, with the investigation, management, and notification of suspected cases of the new coronavirus. Regarding the investment of re-

Table 1. Agenda of priorities for hospital care to face COVID-19, by Brazilian regions and states, according to State Contingency Plans 2020.

Percentage of State Priorities		Brazilian Regions										Brazil	
National Priorities	State Priorities	North		Northeast		Southeast		Midwest		South			
		n	%	n	%	n	%	n	%	n	%	n	%
1. Covid-19 care network systematization	1. Establish a network and regulation flow for severe cases	7	100	9	100	4	100	4	100	3	100	27	100
	2. Ensure regular inter-hospital transportation	2	28.57	5	55.55	2	50	3	75	2	66.33	14	51.85
	3. Perform counter-referral of patients	5	71.42	1	11.11	0	0	1	25	2	66.33	9	33.33
	4. Sort the network with complexity and regionalization levels	1	14.28	2	22.22	2	50	1	25	1	33.33	7	25.92
	5. Indicate referral hospitals and reserve beds for contingencies	6	85.71	7	77.77	3	75	3	75	1	33.33	20	74.07
2. Covid-19 urgent care network definition	6. Provide a Pre-Hospital Care Network	0	0	3	33.33	1	25	2	50	2	66.33	8	29.62
	7. Implement the reception of cases with risk classification	1	14.28	2	22.22	2	50	1	25	0	0	6	22.22
3. Orientation of hospital care to Covid-19 cases	8. Guide clinical management	7	100	9	100	4	100	4	100	3	100	27	100
	9. Estimate the need for HRH	1	12.48	3	33.33	1	25	0	0	0	0	5	18.51
	10. Support the Hospital Epidemiological Surveillance Centers	4	57.14	2	22.22	0	0	0	0	0	0	6	22.22
4. Hospital care for severe Covid-19 cases	11. Secure equipment, laboratory supplies, and PPE	7	100	9	100	4	100	4	100	3	100	27	100
	12. Guarantee the stock of medicines	4	71.42	4	44.44	0	0	4	100	3	100	15	55.55
	13. Purchase mechanical ventilation devices	0	0	0	0	0	0	0	0	0	0	0	0
5. Increased hospital bed capacity	14. Establish the calculation of bed availability	1	14.28	1	11.11	1	25	1	25	0	0	4	14.81
	15. Determine the Emergency Plan or the opening of campaign hospital units	1	14.28	3	33.33	2	50	1	25	1	33.33	8	29.62
	16. Articulate inter-federative support in a situation of overcrowding in the state network	1	14.28	2	22.22	0	0	0	0	1	33.33	4	14.81
6. Emergency contracting of Covid-19 ICU beds	17. Contract private ICU back-end beds for severe COVID-19 cases	0	0	0	0	0	0	0	0	0	0	0	0

Source: State Covid-19 Contingency Plans.

sources, priority was given to ensuring supplies, PPE, medications, laboratory tests, and mechanical ventilators, which are decisive in expanding ICU beds. Priority themes for health workers' qualification were clinical management, biosafety, hospital infection control, and patient safety and transportation.

Following the guidelines recommended by the PCN, the twenty-seven PCEs analyzed presented a set of priorities that structured Chart 2, as per the six categorical recommendations from the PCN for hospital care.

Concerning the first category of national priority that concerns care network systematization, we observed that five state priorities were correlated and are shown in descending order according to the quote identified in the PCE: the establishment of a network and regulation flow of severe cases (27), indication of referral hospitals with contingency bed reservation (20), regulation of inter-hospital transportation (14), carrying out counter-referral of patients (09) and sorting the network considering the complexity and regionalization levels (07).

The urgent care network was mentioned in only two plans as a priority. One is pointing to the need to make the urgent care network available for pre-hospital care (08), and the other that draws attention due to the emphasis given to the risk classification in the reception of cases, early detection of severe cases, referentiality among care points in the care network (05).

Regarding hospital care for COVID-19 cases, the three priorities mentioned in the PCEs pointed to guidelines related to clinical management (27), recommendations to the hospital epidemiological surveillance centers (06), and HRH estimates for coping (05). Equipment, laboratory supplies, PPE (27), and medicines (15) were secured for hospital care to severe cases, but no PCE pointed to the need to purchase mechanical ventilation devices (00).

Concerning the recommendation to expand hospital beds, the category was shaped primarily on the strategy of opening campaign hospital units (08) and calculating the availability of necessary beds (04) and the need for inter-federative support in the event of state network overcrowding (04).

It is noteworthy that one of the priorities in the contingency agenda, which corresponds to the emergency contracting of ICU beds, does not appear in any PCE.

Also, no PCE thoroughly considered the contingency agenda (with all seventeen priorities). The Brazilian agenda was characterized by heterogeneous planning when confronting COVID-19.

Thus, when analyzing state priorities from Chart 2, it can be seen that five PCE cited 10 to 12 priorities on the agenda for coping with COVID-19 in Brazil. Among them are Acre and Santa Catarina (10), Bahia and Minas Gerais (11), and Goiás (12). On the other hand, the states that included the lowest number of priorities contained in the federal agenda stand out, which are the PCEs of Rondônia (03), Alagoas, Ceará, Espírito Santo, and Rio Grande do Sul (04), and Roraima, Piauí, São Paulo, Mato Grosso do Sul and the Federal District (05).

Following these results, we highlight two relevant political analysis situations on hospital contingency for COVID-19 in Brazil. The first concerns the states with more priorities related to the systematization of the COVID-19 care network, namely, Bahia, Goiás, and Santa Catarina. Concerning the COVID-19 urgent care network, Bahia, Minas Gerais, and Goiás considered all priorities. As for hospital care guidance, Bahia and Maranhão considered all priorities. No state pointed to care for severe cases, expanded bed capacity, and ICU beds' emergency contracting.

In the case of non-prioritized high-relevance actions, the second analytical aspect of hospital contingency to COVID-19 in Brazil emerges, as no state has prioritized the acquisition of mechanical ventilators and the contracting of ICU beds for severe cases.

Discussion

Based on the theoretical conception of the governmental pre-decision process and the formulation of the agenda, the analysis of the 28 Contingency Plans identified national recommendations and defined state priorities, their convergences, and misalignments.

As an instrument of recommendation to subnational units, the PCN evidenced significant gaps according to WHO recommendations for planning and implementing health policies and developing a strategic response plan for COVID-19[2-20].

It is noteworthy that what was expected for the national level would be planning and monitoring, securing ministerial involvement, estimating resources to contain the disease, and coordinating multisectoral strategies to provide financial support[21]. However, the PCN explained

Chart 2. Agenda of state and the Federal District priorities to cope with Covid-19 regarding hospital care, by Brazilian regions and states and State Contingency Plans, 2020.

Priorities		FU by Regions																											
National	State	North							Northeast									Southeast				Midwest				South			N
		AC	AM	AP	PA	RO	RR	TO	AL	BA	CE	MA	PB	PE	PI	RN	SE	ES	MG	RJ	SP	GO	MT	MS	DF	PR	RS	SC	
Covid-19 care network systematization	Establish a network and regulation flow for severe cases	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■								27
	Ensure regular inter-hospital transportation	■		■					■	■			■			■	■		■	■									14
	Perform counter-referral of patients	■		■	■		■	■		■																			09
	Sort the network with complexity and regionalization levels		■							■			■						■	■									07
	Indicate referral hospitals and reserve beds for contingencies	■	■	■	■		■	■		■	■		■	■	■	■	■	■	■		■								20
Covid-19 urgent care network definition	Provide a Pre-Hospital Care Network									■					■		■		■										08
	Implement the reception of cases with risk classification		■							■									■		■								05
Orientation of hospital care to Covid-19 cases	Guide clinical management	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■								27
	Estimate the need for HRH		■							■		■		■					■										05
	Support the Hospital Epidemiological Surveillance Centers	■		■	■			■		■		■																	06
Hospital care for severe Covid-19 cases	Secure equipment, laboratory supplies, and PPE	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■								27
	Guarantee the stock of medicines	■	■	■				■					■	■		■	■												15
	Purchase mechanical ventilation devices																												00

it continues

Chart 2. Agenda of state and the Federal District priorities to cope with Covid-19 regarding hospital care, by Brazilian regions and states and State Contingency Plans, 2020.

Priorities		FU by Regions																														
National	State	North							Northeast										Southeast				Midwest			South			N
		AC	AM	AP	PA	RO	RR	TO	AL	BA	CE	MA	PB	PE	PI	RN	SE	ES	MG	RJ	SP	GO	MT	MS	DF	PR	RS	SC	
Increased hospital bed capacity	Establish the calculation of bed availability																												04
	Determine the Emergency Plan or the opening of campaign hospital units																												08
	Articulate inter-federative support in a situation of overcrowding in the state network																												04
Emergency contracting of Covid-19 ICU beds	Contract private ICU back-end beds for severe COVID-19 cases																												00
Sub-total of considered actions		10	8	8	6	3	5	8	4	11	4	7	8	9	5	6	7	4	11	6	5	12	7	5	5	7	4	10	
Sub-total of considered actions not considered		7	9	9	11	14	12	9	13	6	13	10	9	8	12	11	10	13	6	11	12	5	10	12	12	9	13	7	
Total actions		17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	

Source: State Covid-19 Contingency Plans.

the national coordination of the coping through the COE/MS, not estimating necessary resources, multisectoral strategies, and financial contributions[13].

The WHO's pillars still recommended establishing surveillance teams for quick responses and investigation of cases with contact screening protocols, monitoring of confirmed cases, and reporting of the disease's epidemiological trends[2-21]. The Brazilian PCN did not detail which protocols would be adopted for screening contacts and monitoring confirmed cases. It defined the disease's trends in the country (clinical data, mortality, and occurrence in risk groups) would be informed by the Epidemiological Bulletins[21].

It was also recommended to design national response plans to the disease by managing health services to face the exponential increase in suspected and confirmed COVID-19 cases. Concerning hospital care, this would be performed through the feasibility of diagnostic methods and therapeutic procedures, using the health equipment available and capable of receiving patients. To this end, strategic locations with installed capacity for ICU beds would be identified, and emphasis would be given to guidelines for mild symptoms to avoid unnecessary hospitalizations[2-21].

However, the PCN was not very specific. In summary, it presented guidelines for the proper functioning of services and the need to expand the health care network, barely exploring the descriptions of actions in situations of COVID-19[21].

We also perceive gaps in the PCN in the face of the WHO recommendations related to the design of prevention and control strategies for COVID-19 infections among health professionals and planning of how professionals' infection cases and screening, early detection, and infection source control mechanisms where health teams work[2] would be registered and investigated.

It should also be noted that the Federal Government's official position was striking in the definition of agendas with the states, primarily due to internal differences between its allies and the Ministry of Health, markedly at the time of the PCN. The conflicts involved statements by the President of the Republic, first denying the severity of the pandemic, in contrast to the guidelines of the WHO and the role of the MS[22,23], and then disagreeing with state governmental actors on the adoption of social distancing strategies and recommendations for scientifically unproven COVID-19 drug treatment efficacy during the construction of the agendas and PCE formula-

tions. Social distancing is the primary solution to contain transmissibility, seeking to avoid the increase in the number of cases and deaths due to COVID-19[24]. These disagreements between health authorities suggest the lack of national coordination for adequate communication[8], especially regarding the slowdown in the COVID-19 spread, minimizing its impact on health systems, ensuring better access to hospital services in a projected hospital use during the outbreak of COVID-19, and easing pressure on the health system[25].

Positively, a line of care focused on care to COVID-19[26] has been developed, favoring the reorganization of work processes in health services and systems, with actions targeting health education, epidemiological surveillance, reception and early detection of cases, monitoring of mild cases by digital technologies, and hospitalization of severe cases only.

Given the limited installed capacity of the SUS hospital network in most Brazilian states[27], it would be necessary to establish the regulatory flow for severe cases, in which hospitalization is essential to the clinical management of COVID-19[28], a situation that serves PAHO by establishing mechanisms for centralized bed management[29].

The analysis of the PCEs also allowed the identification of essential weaknesses in the formulation of hospital care policies in coping with COVID-19 in Brazil. It draws greater attention to those issues related to containment, as only three of the 17 state contingency priorities were explained in all PCEs, namely, establishing the regulation flow for severe cases; securing equipment, laboratory supplies, and PPE; and guiding professionals on clinical management, while the remaining 14 priorities were heterogeneous among these planning instruments.

The main highlights of this feature are only four states establishing a contingency bed calculation method, five considering the need to plan the allocation of workers for care activities, and six providing for the opening of field hospitals. Even more notorious is the condition that none of the PCEs have established complementary contracting of ICU beds and prioritized the purchase of mechanical ventilation devices.

In particular, the latter could determine a severe ethical constraint since the imbalance between its availability and the increased demand for critically-ill patients can be fatal for health care[30,31]. Especially when considering the uneven access to ICU beds among SUS-dependent users and dual beneficiaries covered by the SUS and private health insurance[32]. This inequality was considered by the National Health Council in its recommendation to request private beds to SUS[33] managers and by establishing the so-called single waiting list for the regulated occupation of ICU beds in COVID-19 cases[34]. It is also noteworthy that no state included in its PCE the possible acquisition of private ICU beds for the back-end to care for severe COVID-19 cases.

The lack of the estimated health workers allocated to fight against COVID-19 on more than 20 state agendas is dangerous since this is one of the founding and fundamental elements of the strategies developed in the health system[35]. Planning it should be a condition for developing the emergency action plan, mainly to ensure the functional activity of providing hospital services[36].

It should be emphasized that many State Health Secretariats reformulated their plans during the study's development, mainly due to the epidemiological evolution of the epidemic in their territories, adjustments to international health authorities' guidelines, and based on new scientific evidence about COVID-19. This effort is positive and was considered, given the dynamics of updating the contingency agenda.

Conclusion

In light of the public policy cycle theory, the Contingency Plans analysis showed the divergences vis-à-vis the COVID-19 coping strategies and pointed out similarities and differences between the priority agendas defined at the state level. Considering the continuous updating of these plans due to the pandemic's dynamics, we should emphasize the importance of continuing this study, focusing on implementing and evaluating the results achieved in each state.

From this perspective, it is essential to emphasize that the critical review of the political options materialized in the PCEs should not be limited to strategies and actions to ensure hospital care for severe cases. It should include the organization of the entire line of care for COVID-19 in the various healthcare points of the SUS care network, linked to a vast intersectoral network capable of developing the necessary actions to reduce social inequalities and differentiated care for vulnerable groups.

Undoubtedly, the pandemic imposed on health systems in several countries the construction of agendas to face significant challenges to

the adequate provision of services[37,38]. In the Brazilian case, the emergency brought about by the COVID-19 pandemic exacerbated pre-existing difficulties, which had already been compromising the SUS and surveillance, regulation, communication, and health care services rooted in underfunding, hospital scrapping, staff shortage, private sector preference, among other system problems that limit the planning and implementation of various care actions for users and the population.

In this scenario, the broad participation of other political actors, jurists, participants in the social control bodies, and society at large is crucial to collaborate in the debates about public policies and health actions. Thus, overcoming the severe health crisis has been assumed as a group task of many movements and entities around a movement called *Frente pela Vida* composed of thirteen entities, among them, the Brazilian Association of Collective Health, the Brazilian Association of Health Economics, Brazilian Center for Health Studies, Brazilian Society of Bioethics, *Rede Unida*, National Health Council, representatives of public universities, unions and Brazilian parliamentarians.

These entities advocate, for example, that the COE be resumed as provided for and that it includes representatives of the health and bioethics scientific societies and social control entities and movements because, after the change in command at the Ministry of Health, the actions of the COE were restricted to logistical coordination in the distribution of supplies across the country. In light of these and other criticisms of the PCN, these entities developed a National Plan to Combat the COVID-19 Pandemic to subsidize governments to plan and implement effective pandemic control actions, a document that can undoubtedly contribute to improving PCEs in the fight against COVID-19.

Collaborations

TBS Santos, LR Andrade, SL Vieira, JA Duarte, JS Martins, LB Rosado, JS Oliveira and ICM Pinto conceived the methodological design of the manuscript, produced data, participated in the analysis and interpretation of results, discussed conclusions, and approved the final version of the manuscript.

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