



A proposal of Collaborative Governance in the Consortia in Brazil after the indicators of the Perception of Corruption in the Health Sector

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Abstract: -

Originality: The Ethics in Health Institute, in partnership with *Fundação Getulio Vargas* - FGVethics and FGVsaúde, which received the Stars of Education Award in 2025 for best private university in Brazil; launched the questionnaire for the research "Indicators of the Perception of Corruption in the Health Sector," applied to 987 representatives from different segments of the health chain.

The research, released in May 2026, indicated that 66.8% of respondents classify corruption in health as high and 21.5% as moderate. The negative perception reaches 92.5% of public institutions and 88.4% of private institutions. In addition, 63.6% of participants reported having experienced or witnessed concrete situations of corruption, such as favoritism in contracting and undue influence in prescription. The results also show that 66.8% of respondents classify corruption in health as high, while another 21.5% consider it moderate. In practice, almost nine out of ten participants perceive corruption as a relevant problem in the sector.

There is a large gap in literature on the topic of public health consortia for two reasons:

(i) The articles do not address, in a multidisciplinary way, the problems that arise in the formation and maintenance of public consortia, whose theoretical framework is Collaborative Governance, such as the management of differences in resources and power among members, difficulties in knowledge sharing, and articulation disorder (leadership) (ii) both issues, collaborative governance (knowledge) and consortia (intelligence) are new in the academic literature.

Furthermore, it is not clear what the main purposes of a Consortium are, such as sharing resources or obtaining better prices, or both. It is a common knowledge the strong corruption in Brazil due to being a culture turned to distraction such as Carnival. In this case, the consortiums have great difficulty in providing effective services to the citizens because they function as intermediaries between the government and the hospitals without social control or social participation.

Objective: The objective of this work is to provide a new way to build a Public Consortium, through Communities of Practice (Knowledge Management) to better share knowledge and decisions. Unlike social networks, communities of practice rely on experts in thematic groups (ex. Auctions) as mediators of the discussion/debate with the focus always on patient-citizens.

Material and Methods: A questionnaire regarding consortia (collaborative governance) was completed by the executive secretaries of two consortia in Rio de Janeiro (<https://forms.gle/N9CNGRiZrBari7yP9>).

Results: This work is not interested in resolving political's issues, such as the sponsorship of the State governor in relation to certain prefectures and these with certain hospitals. It is interested in improving the flow of resources (human, financial, intangible) within the Consortium without altering corruption issues (only in the last four years 383 Brazilian mayors lost their positions due to corruption.) Therefore, the greater result is the proposed a Collaborative Governance model for Consortia in Brazil, based on Communities of Practice, a tool of Knowledge Management.

Conclusions: This model is especially useful for Rio de Janeiro, which is going through true chaos in its health system as a result of the various arrests of governors (5) and mayors (1) and municipal secretaries (1) during and after the two major sporting events (2014 and 2016), a situation that has not yet been resolved.

Keywords: Collaborative Governance, Consortia, Knowledge Management, Health Sector, Intelligence.

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Introduction

Integrated health management within a municipal medical consortium, with multi-level teams of doctors, nurses, and other professionals offering follow-up services such as consultations, assessments, treatment, and health education, particularly on chronic diseases, is promising.

Agreements produced by collaborative governance are easier to implement and more durable because, by taking into account a broad spectrum of interests, they are less likely to generate opposition (Susskind & Cruikshank, 1987; Moote et al., 1997; Innes & Booher, 1999; Wondolleck & Yaffee, 2000; Gunton & Day, 2003).

However, even when stakeholders are motivated to negotiate, the asymmetrical distribution of negotiation skills and resources often allows the most powerful stakeholders to dominate a process (Amy, 1987; Weidner, 1998).

In the health sector, these differences are resolved with solidarity, trust, reciprocity, engagement, and shared understanding in the pursuit of life. As we will see in the interviews, larger municipalities understand the role of the smaller municipality as a beggar and even accept the construction of hospitals in these municipalities, for example. With regard to SAMU (Mobile Emergency Care Service), which has a very particular role in resolving emergencies, collaborative governance is even more promising.

The main role of collaborative governance is the sharing of information and knowledge.

However, this often causes an overload that depends on a Knowledge Management Platform to organize the process of sharing, collecting, and making decisions.

Therefore, this article is divided into the following sections:

- 1- Similarities and differences between Collaborative Governance - CG and Network Governance - NG
- 2- Collaborative Governance and Barriers
- 3- Social Capital in Consortium
- 4- Methodology
- 5- Interviews
- 6- Knowledge Management

1- Similarities and differences between Collaborative Governance and Network Governance

Both structures are based on trust, reciprocity, negotiation, and interdependence among actors, in addition to having the objective of providing services through a collective decision-making process.

However, Collaborative Governance focuses more on collaborative characteristics, while Network Governance is

more related to a managerial perspective, which considers the management of public networks and public policies.

Ansell and Gash (2007) explain that the definition of collaborative governance aims to distinguish it from two alternative patterns of policymaking: adversarialism and managerialism (Busenberg, 1999; Futrell, 2003; Williams and Matheny, 1995). Unlike decisions made in an adversarial manner, collaborative governance is not a form of "all or nothing" type of interest mediation. In collaborative governance, stakeholders will often have an antagonistic relationship with each other, but the goal is to transform these relationships into more cooperative ones. In managerialism, public agencies make decisions unilaterally or through closed decision-making processes, usually relying on experts from the agency itself to make decisions (Futrell 2003; Williams and Matheny 1995).

Network Governance is defined as "entities that merge the collaborative provision of public goods and services with the development of collective policies" (Isett et al. 2011).

Ansell and Gash (2008) define Collaborative Governance as "a governmental arrangement where one or more agencies

Research on network governance, many scholars argue, originated in academic interests in corporatism, state theory, policy networks, co-implementation, and co-provision of services, where a variety of interest groups or stakeholders in the political and public policy system (network) mitigate conflicts among themselves and instead create broad policy consensus, contributing to the co-provision of public services (Molina and Rhodes 2002; Ottaway 2001).

Research on collaborative governance, on the other hand, as scholars argue, is rooted in classical liberalism and civic republicanism (Cohen 2018; Perry and Thomson, 2004). According to classical liberalism, the motivation for collaboration is selfish, and according to civic republicanism, collaboration can signify values of trust and mutual understanding (Cohen 2018). According to Wang and Ran (2021), Collaborative Governance (CG) focuses on sharing (e.g., information sharing, belief sharing, identity sharing, understanding sharing, service design sharing, and vision sharing), collaborative characteristics (e.g., deliberation, consensus, mutuality/reciprocity, and dialogue), joint efforts (e.g., integrated governments, joint decision-making, and joint action), and institutional design (e.g., institutional fragmentation, institutional collective action, institutional arrangement, and norms).

Two crucial issues have been highlighted in urban regeneration governance: levels of government intervention and public-private-civic engagement (Lidegaard et al., 2018). Based on these two critical issues, three modes of governance in urban regeneration have been identified: state-led, market-based, and collaborative. While many studies have focused on state-led or market-based modes in

urban regeneration, few studies have focused on the collaborative governance mode (Wang, Ran, and Li, 2022). The second mode, based on the market, focuses on contractual relationships between local governments and businesses for regeneration projects (Bärnthaler et al., Citation 2020; Dubini et al., Citation 2012). Compared to the state-led mode, the market-based mode can reduce financial pressures on the state and improve the efficiency of regeneration, and has therefore been widely used since the New Public Management movement (Martins & Pereira, Citation 2019; Noring, Citation 2019).

It is especially important to understand how local residents, non-state and non-market stakeholders at the street level impact the effective governance of urban regeneration in a diverse and complex environment where power is diffuse and conflicts are inevitable, which can only be achieved through collaboration and partnership among all stakeholders.

The third mode, the collaborative governance mode, is therefore increasingly seen as a proactive political instrument and probably a better solution in urban development, because the horizontal form of coordination, public participation, and deliberation are key factors for effective urban regeneration (Ansell & Gash, Citation 2008; Van Bortel & Mullins, Citation 2009; Wang & Ran, Citation 2021).

However, the main problem lies elsewhere: “Although voluntary cooperation has been implemented as an alternative way to implement functional decentralization, self-organized intermunicipal governance is generally considered unusual and problematic due to its top-down perspective and: (i) potential variations in the legal-constitutional framework, local institutions and preferences, and (ii) difficulties in the interaction between potential governance mechanisms that affect transaction costs. Furthermore, it is important to study how different national institutional contexts structure the configuration and preferences of actors, the selection of tasks for collective action, and the mechanisms available to resolve collective action dilemmas (Andersen and Pierre, 2010; Feiock, 2009; Hulst et al., 2009).

The collaborative process is highly iterative and non-linear, and is therefore represented (with considerable simplification) as a cycle (Ansell and Gash, 2007).

They reduce the critical initial conditions to three main variables: imbalances in the resources or power of the different stakeholders, their incentives to collaborate, and their history of conflict or cooperation (Ansell and Gash, 2007).

2 - Collaborative Governance and Barriers

Collaborative governance is broadly defined as the functions and structures of decision-making and policy administration that involve the public in a beneficial way, overcoming the limitations of public institutions (Gash, 2022). Local collaborative governance is a significant theme in public administration, as it aims to address governance failures, high costs, and the politicization of regulation through the development of contingency approaches to local governance (Berthod et al., 2023).

The success of a collaboration depends on formal factors (rules, procedures) and informal factors (facilitating leadership, trust, commitment, shared understanding) (Bianchi et al., 2021, Bryson et al., 2015, Emerson and Nabatchi, 2015).

The implementation of collaborative governance promotes community cohesion, creating a platform for various stakeholders to engage in decision-making processes that balance individual and collective interests (Imperiale et al., 2023).

Feng et al. (2025) apply a governance framework that encompasses five dimensions: roles, incentives, communication, decision-making, and value creation.

Agranoff (2007) typified four types of collaborative networks based on their purpose: informational, developmental, outreach, and action-oriented.

The purpose of outreach networks is to develop change strategies, involving an exchange or coordination of resources. However, decision-making and implementation still remain within the competence of the actors. Finally, action networks adopt collaborative strategies and develop and provide services in a coordinated manner (Agranoff, 2007; Estermann et al., 2009).

In addition, collaborative regimes have been used to address complex problems that exceed the capacity of the State and thus allow “creating public value that could not otherwise be achieved” (Fliervoet et al., 2016, Sørensen and Torfing, 2021, Voets et al., 2021).

Individual interests can undermine discussions between different groups.

Decision-making processes are often centralized, with limited involvement of key actors, particularly those most affected and vulnerable, such as women and indigenous communities (Weiland et al., 2021). For example, governments may use co-management not as a power-sharing mechanism, but as a tool to achieve predetermined goals, excluding local actors from meaningful participation (Gelcich et al., 2006; Miller et al., 2019).

Governments often hesitate to share authority due to skepticism regarding people's knowledge and self-

organizing capacity, despite the value of local knowledge as a complement to scientific data (Pomeroy and Berkes, 1997).

These findings are aligned with previous literature on governance, which highlights that when communities lack legal authority, trust in government is weakened, thus undermining legitimacy (Haugaard, 2022; Laurino et al., 2024; Wood and Gray, 1991).

The impact of political support and organizational culture can be positive or negative, depending on the context. Political support can be a double-edged sword in collaborative governance processes. On the one hand, politicians can provide funding to a project, prioritize it over other policy initiatives, connect stakeholders, resolve conflicts, and increase the legitimacy of the collaboration. On the other hand, however, political pressure can also lead to confusion of political objectives, loss of political neutrality status, and obstruction of projects (Van Dijck & Steen, 2022).

There are several barriers when dealing with a Collaborative Governance Platform.

For example, the involvement of key (public) agencies or service providers (private) with municipalities and consortia can generate difficulties given the different missions, visions, and goals of these organizations. Furthermore, the very relationship between municipalities and public consortia, as we will see in the interviews, can generate difficulties, given the different levels at which the management and administration of these entities are located, in addition to the issue of honesty in dealing with information and financial resources.

3- Social Capital in a Consortium

Bourdieu (1985) defined social capital as the sum of tangible or potential assets associated with a lasting network of institutionalized relationships based on recognition and acquaintance.

Goksel and Aydintan (2017) considered both emotion-based trust and cognition-based trust regarding social capital.

According to Zheng et al. (2026), trust-based interpersonal relationships strongly influence the contribution of tacit knowledge. Tacit knowledge is primarily based on an individual's experience and reflection, making it highly context-specific and inclusive of a personal nature.

In this sense, it is important to note that social capital depends not only on the physical connection between individuals, but also on the quality of these relationships and the ways in which they are cultivated over time.

Three types of social capital have been identified as important for networks within, through, and beyond communities: bonding, bridging, and linking social capital

(Pretty, D. Smith, 2004; Narayan & Cassidy, 2001; Monteil, P. Simmons, A. Hicks, 2020).

Social capital of connection describes the connections between people with similar perspectives, goals, and mindsets within communities.

Social capital of bridging describes the ability of groups and individuals to establish connections with those who may have different views or backgrounds in diverse communities.

Social capital of linkage describes the ability of groups and individuals to engage in vertical relationships with external agencies or organizations, whether to participate in policy development or to utilize available resources (Narayan & Cassidy, 2001).

Ritzel and Mann (2025) found that, for nine out of ten variants of the model studied, the relationship between social capital and perceived benefits was statistically significant and positive.

4- Leadership in Consortia

Wang and Ran (2021) explain that leadership is fundamental to the success of collaborative efforts, as a collaborative network needs to be initiated, facilitated, mediated, and managed by formal and informal leaders in order to find a balance between competing demands and interests.

The findings of Bonny and Cahlikova (2025) indicate that the lack of leadership and clarification of each partner's role during the pilot phase of a project did not allow for the creation of a shared understanding among the partners involved and led to the domination of a limited number of influential actors.

Din et al. (2023) argue that the importance of leadership in the collaborative governance paradigm cannot be overlooked, as it plays a crucial role in ensuring effective collaboration among stakeholders.

Unfortunately, Ansell and Gash (2008) found that stakeholders often enter the collaborative process with a skeptical mindset. They are sensitive to issues of fairness, concerned about the power of other stakeholders, and wary of the possibility of being manipulated. The legitimacy of the process depends, in part, on the stakeholders' perception that they have had a "fair hearing."

Vangen and Huxham (2003) argue that, to drive collaboration, leaders often need to intervene more directly to shape the agenda.

Indeed, leadership is crucial for establishing and maintaining clear rules, building trust, facilitating dialogue, exploring mutual gains, co-producing knowledge, social learning, and reflexivity.

According to Roque et al. (2026), although the relationship with stress was weaker than with well-being in terms of satisfaction with supervision, the findings reinforce the central role of leadership practices—particularly those related to coordination, facilitation, innovation, and direction—in promoting healthier work environments.

Subramanian and Banihashemi (2026) highlight the importance of open communication, empowerment, teamwork, and transparency, and make recommendations for leadership development programs focused on emotional intelligence, communication, and mentoring.

These programs facilitate shared leadership.

Shared leadership emerges in teams as team members actively assume leadership roles without being assigned to those roles by the team's formal leader (Wassenaar and Pearce, 2017, p. 169).

Bauer et al. (2025) found that shared leadership in projects is positively associated with the development of leadership skills in project professionals.

5- Methodology

Semi-structured interviews with key stakeholders from established healthcare consortia in Brazil were qualitatively analyzed to identify best practices and successful organizational strategies. A qualitative methodology was selected because it allows for exploration of developmental processes and provides insight into the complex and context-dependent nature of consortia operations.

Systematic text condensation was used to analyze interview data and generate detailed descriptions of consortium configurations and defining characteristics. This analytical approach supported understanding of the factors influencing the formation, sustainability, and effectiveness of consortia. Purposeful sampling guided the selection of participants, focusing on individuals affiliated with recognized and high-performing consortium organizations. Data collection occurred between January and March 2026 through the survey available at <https://forms.gle/N9CNGRiZrBari7yP9>

Before implementation, the interview guide was pilot-tested with two consortia located in Rio de Janeiro, São Paulo and Rio Grande do Sul and revised accordingly by the author. Interviewers used the guide as a flexible framework to ensure coverage of key topics while permitting respondents to expand on relevant experiences and share illustrative examples. Direct quotations were documented whenever feasible, and comprehensive interview notes were subsequently revised for clarity.

The analysis involved an iterative cycle of coding, interpretation, discussion, and revision to refine emerging themes and strengthen the validity of the findings. To enhance trustworthiness, summarized results were returned

to interviewees for verification before submission for publication.

4- Analysis of Interviews in Health Consortia in Rio de Janeiro - RJ, São Paulo – SP and Rio Grande do Sul - RGS.

Public consortia in Brazil had an administrative character until 2005 when Law No. 11,107, of April 6, 2005, was enacted, establishing general rules for contracting public consortia.

This law provides for two types of contracts:

1- Cost-sharing contract.

2- Program contract.

The program contract is made with a federative entity (municipal, state, or federal) or with an entity of its indirect administration, for the provision of public services.

According to Article 2, the Union will only participate in public consortia in which all the States in whose territories the consortium municipalities are located are also part of the consortium. According to Article 3, the public consortium will be constituted by a contract whose execution will depend on the prior signing of a protocol of intentions, whose main clauses are (Article 4):

V. the criteria for authorizing the public consortium to represent the federated entities before other spheres of government in matters of common interest.

X – the conditions for the public consortium to enter into a management contract or partnership agreement;

Article 8 explains that the consortium members will only deliver resources to the public consortium through a cost-sharing agreement. An important observation for item 5.

§ 5. The consortium member that does not allocate, in its budget law or in additional credits, sufficient appropriations to cover the expenses assumed through a cost-sharing agreement may be excluded from the public consortium, after prior suspension.

The interviews were conducted with the executive secretaries of the consortia in RJ, SP and RGS. The questionnaire is at the end of the article.

6.1. Interviews in the Health Consortia in Rio de Janeiro (CISBAF and CISMEPA)

6.1.1 Intermunicipal Consortium for Public Security of Baixada Fluminense CISPBAF

The Intermunicipal Consortium for Public Security of Baixada Fluminense CISPBAF was effectively created with legal personality on 11/12/2018 and is currently composed of 19 municipalities in the State of Rio de Janeiro, with the Mayor of the Municipality of Duque de Caxias as its president. According to the CISBAF website, one of the

main objectives of CISPBAF is to create a belt to ensure greater public security, urban mobility, intelligence in the delivery of public services, monitoring of floods and inundations, among other activities that facilitate the lives of the population and make public services more efficient. The executive secretariat of CISBAF has 27 years of experience in this area. Since 2007, the consortium has offered examinations and procedures.

The consortium is subject to the SUS (Brazilian Unified Health System) agreement bodies and for this purpose uses the Regional Inter-managerial Commission - CIR, which has representatives from the State and all municipalities involved in the Consortium.

Consortia can receive resources from parliamentary amendments, but the resource must first be delivered to the leading municipality of the consortium. This creates difficulties, as shown in an interview conducted at the CISBAF Consortium, since the municipality commits most of its revenue to the payroll of its employees. This causes delays in the transfer of the obtained resource.

Two municipalities have already been sued, and after that, the municipalities resumed regular payments.

There is a payment rate between 90-92% of what is stipulated in the cost-sharing agreement.

Cisbaf received a parliamentary amendment which, after bureaucratic procedures and negotiation, was used for 670 elective surgeries in children.

Cisbaf is a consortium that serves 3.5 million inhabitants from 12 municipalities in the Baixada Fluminense region. The consortium has 500 collaborators and 150 employees.

It is a regional management tool for joint actions among the consortium members for the benefit of the population.

Regarding the question about the barriers, the executive secretariat of CISBAF clarifies the difficulty of internal legislation to operationalize the bidding law.

Regarding the question about the benefits, the secretariat says that the benefits of the consortium are numerous, but the most important are: cost-effectiveness, quality, efficiency, and economies of scale.

Regarding the question about ongoing projects, it mentions program contracts for the execution of specific programs.

It provides as an example the MARQUEFACIL Program, which it launched in 2018, with the objective of reducing unmet demand and expanding the population's access to specialized services. The program is structured based on the accreditation of private providers.

There is another program contract to manage the SAMU base, located at the CISBAF headquarters, which receives

between 1200 and 1500 calls a day. SAMU has 7 doctors during the day and five during the night.

Regarding the question of the possible imbalance of resources between small and large municipalities, he makes a comparison between Brazil and Spain, since he was in Catalonia in 2007 to learn about the Consortium (technical visit). There, there is primary care plus hospital care. They accredit private hospitals for elective surgeries. They are public limited companies (clinics) with management freedom. All patient records are electronic and the clinics' budget is the responsibility of the manager. If they monitor the patient's health, there will be less spending and then the manager receives a bonus. It works so well that only 3% of the Spanish population has health insurance.

He clarifies that the Consortium's regulations, and the management of the SUS itself, are quite complex and bureaucratic. One of the reasons is that the resources for the SUS are divided into three parts, with the federal government receiving 50%, the states 25%, and the municipalities 25%.

Regarding the question about the use of financial and human resources, it states that the accreditation of providers follows its own table and the SUS (Brazilian Public Health System) table is not competitive.

Transparency is very high and the regularity of payments is published on the consortium's website.

The consortium has a reserve budget to pay the provider if the municipality does not transfer the money. In the meantime, it manages to receive payment from the Municipality due to the blocking of access to the services offered by the consortium.

Furthermore, regarding the question about the use of financial resources, it clarifies that the cost-sharing agreement is made through a letter of intent and administrative expenses are shared among the federated entities.

IT MENTIONS MINISTRY OF HEALTH ORDINANCE NO. 2,905/2022, IN PARTICULAR THE FINANCIAL AND BUDGETARY RULES APPLICABLE TO THE SUS (UNIFIED HEALTH SYSTEM), SUCH AS THE PROTOCOL OF INTENTIONS AND THE COST-SHARING AGREEMENT THAT PROVIDE FOR THE FINANCING METHOD OF THE PUBLIC CONSORTIUM.

It also mentions Bill 196, which, in addition to amending Law 11,107/2005, provides for community participation in the management of the Unified Health System (SUS) and intergovernmental transfers of financial resources in the health sector.

It mentions the National Registry of Health Establishments (CNES) as a fundamental element in the management of health system information.

Regarding training, it states that there is a Platform for this and the Continuing Education Program has certified 8,000 professionals.

There is a partnership with the State Court of Auditors to resolve doubts about the new Contracts Law, but also courses in the areas of budgeting, law, and planning. All categories have goals, and if they meet the goals, they earn more salary.

Regarding the service provided to the 12 municipalities and the differences in needs and resources, it clarifies that the large municipalities (Duque de Caxias and Nova Iguaçu) accept that the Consortium helps the smaller ones because they are also helped. There was even a case of a meeting in the Federal Capital to ask for money from a hospital that was not in the mayor's municipality. As they are very close, service in a municipality within the consortium's region is like an advantage for everyone.

6.1.2. CISMEPA - Consórcio Intermunicipal de Saúde do Médio Paraíba – RJ

On July 1, 1998, through the signing of the Consortium Agreement by the mayors and Health Secretary of the region, the Intermunicipal Health Consortium of the Médio Paraíba Region, CISMEPA, was conceived.

More recently, two important pieces of legislation were significant for the history of CISMEPA.

Ordinance 399/2006, known as the Pact for Life, consists of a set of health commitments, expressed in process and outcome objectives and derived from the analysis of the country's health situation and the priorities defined by the federal, state, and municipal governments. It is a commitment among the managers of the Unified Health System (SUS) to qualify and implement the process of decentralization, organization, and management of the SUS.

Decree No. 6017/2007 establishes rules for the execution of Law No. 11,107, of April 6, 2005, and helped CISMEPA transition from a private law consortium to a public law consortium.

When asked about the barriers, he states that the CIR has become the best tool for dialogue.

The Inter-managerial Commissions operate at three distinct and complementary levels, ensuring that decisions are articulated from national planning to local execution.

1. Tripartite Inter-managerial Commission (CIT) – National Level, Bipartite Inter-managerial Commission (CIB) – State Level, Regional Inter-managerial Commission (CIR) – Regional Level

The agreement refers to the formal agreements that enable shared management. The commissions do not audit accounts, but define the rules of the game, that is, the operational, financial and administrative aspects.

CISMEPA has a 20-year history and is currently only responsible for SAMU after handing over the management of the Regional Hospital to the State. Discussions for the implementation of the Dra. Zilda Arns Neumann Regional Hospital (HRZA) date back to the 2000s, being revived in 2008 with technical discussions within CISMEPA. The hospital was inaugurated on March 29, 2018.

The executive secretary reinforced that the consortium is seen as a mechanism for implementing public health policy. In fact, CISMEPA's main focus is on providing emergency and urgent care through the Mobile Emergency Care Service (SAMU). In a second phase, the intention is to expand actions, mainly for the joint acquisition of medicines.

Regarding the first question, it states that most municipalities (smaller size) are in need and the larger ones are hubs.

He explains that he currently has 10 employees, but indirectly has 300.

Unlike CISBAF, which has a single base, CISMEPA has 16 bases in 12 municipalities.

Regarding question 8, he states that he has two education processes.

The first is with the Permanent Education Center - NEP, which promotes two training sessions per month.

The second mentions the partnership with UNIFOA and UNIFLOR Universities to promote emergency training, particularly in cardiovascular care.

Regarding the question, he clarifies that there are well-managed municipalities and others that are poorly managed, and this requires some patience in discussion groups and assemblies of mayors and health secretaries.

Regarding question 12, he mentions the regional health centers (NAG) that supplement the Consortium's budget.

Among the challenges (questions 16 and 17) are: identifying development partners to provide technical support, securing financial support for projects, coordinating resources, and ensuring institutional commitment to project sustainability, aligned objectives, and shared values.

On the other hand, factors that can help overcome these challenges and achieve success include clearly defined rules and boundaries, collective prioritization, openness and transparency, shared resources and equality, member commitment, established governance rules and legal frameworks, periodic communication, organization of events, and promotion of hosted projects.

The focus should be on three dimensions - governance, objective, and work outcome - and not on the dimensions of control, cost, sustainability, and productivity.

4- A Knowledge Management Model for Consortia.

Knowledge Management is an attempt by organizations to capture, codify, organize, and redistribute the tacit forms of knowledge within the organization and make them explicit (Rothberg and Erickson, 2004).

Bali, Wickramasinghe, and Léaney (2009) define Knowledge Management (KM) as a set of tools, techniques, tactics, and technologies designed to leverage an organization's intangible assets through the extraction of relevant data, information, and knowledge to facilitate decision-making.

Rothberg and Erickson (2004) argue that knowledge is static and, ultimately, only has value if people use it (intelligence).

Roland (2000) shared some practical explanations about the formation of cultures and the relationship of state to knowledge and intelligence.

Fincher et al. (2008) and Murray and Schaller (2010) found that countries where there was a strong presence of pathogens before the 20th century developed more collectivist cultures.

Again, the idea is that in areas with a high presence of pathogens, those communities that develop more collectivist norms, restricting individual behavior and showing a less open attitude towards foreigners, tend to have a greater chance of surviving. Other explanations about the origin of individualism versus collectivism involve the higher frequency of rice cultivation over other wheat crops, since rice requires more labor and requires better coordination (Talhelm et al., 2014) or a greater presence of irrigation (Buggle, 2015), in the spirit of Wittfogel (1957). On the other hand, Knudsen (2017) found that a heavy reliance on fishing for sustenance throughout history is more associated with individualism (Roland, 2000).

Roland (2000) explained that geography may have played an important role in determining whether ancient societies would turn into statist or market systems. Roland (2000) demonstrated that countries that can only be governed by statistical systems today have a more collectivist culture, while countries where market systems developed in the past have a more individualistic culture. These South American societies have legal systems that focus more on conflicts between citizens, such as property disputes.

The first definition of culture that was formulated from an anthropological point of view belongs to Edward Tylor, in the first paragraph of his book *Primitive Culture* (1871). Tylor also sought to demonstrate that culture can be the object of systematic study, as it is a natural phenomenon that has causes and regularities, allowing for study and analysis with the aim of providing the formulation of laws about the cultural process and evolution.

For Kroeber, culture is an accumulative process, resulting from all the historical experience of previous generations.

This process limits or stimulates the creative action of the individual.

Félix Keesing and Alfred Kroeber agree that there is no correlation between genetics and culture; for example, anyone who is born, regardless of where they were born, absorbs the culture of the place where they grew up. Kroeber goes further and states that man only differs from animals thanks to culture. For man is a being who is above his organic limitations, culture is an accumulative process, it is said, man accumulates experiences and, therefore, culture.

1. Culture, in addition to genetic inheritance, determines man's behavior and justifies his achievements.

2. Man acts according to cultural norms. His instincts have been partially annulled by the long evolutionary process that has taken place.

3. By acquiring culture, man began to depend much more on learning than on acting through genetically determined attitudes.

4. As humanity has known since the Enlightenment, it is this learning process (socialization or enculturation, no matter the term) that determines his behavior and his artistic or professional ability.

5. Culture is an accumulative process, resulting from all the historical experience of previous generations. This process limits or stimulates the creative action of the individual.

In general, academics suggest that governments should ensure that science is at the forefront of the strategy for economic recovery and economic growth. For them, science produces knowledge and, therefore, produces innovation, which improves the quality of life, democracy, economic growth, and the ability to solve major problems. However, Rothberg and Erickson (2004) state that knowledge is static and, ultimately, only has value if people use it.

In 1989, Richard Ackoff established a simple taxonomy of environmental stimuli that was widely adopted with regard to Knowledge Management - KM, arguing that there are four classes of inputs to any system: data, information, knowledge, and intelligence (Ackoff, 1989).

Davenport and Pruzak (1998) conducted an important study on the differences between data, information, and knowledge.

Data is a set of discrete, objective facts about events. In an organizational context, data is most usefully described as structured records of transactions.

Like many researchers who have studied information, we will describe it as a message, usually in the form of a document or audible or visible communication. Like every message, you have a sender and a receiver. Information is

designed to change the way the recipient perceives something, having an impact on their fairness and behavior.

Most people have an intuitive sense that knowledge is broader, deeper, and richer than data or information.

Knowledge is a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knowers. What this definition makes immediately clear is that knowledge is not clear or simple. It is a mixture of several elements; it is fluid and formally structured; it is intuitive and, therefore, difficult to capture in words or fully understand in logical terms (Davenport et al., 1998).

The transformation of knowledge into intelligence is an operation performed by the human capacity to interpret, analyze, integrate, predict, and act.

Information is analyzed in the context of the patterns, criteria, and personal expectations of the decision-maker to acquire knowledge. Finally, the decision-maker applies knowledge of a specific situation to create intelligence.

Rothberg and Erickson (2004) state that knowledge is socially constructed through collaborative activities, but access to this knowledge is not successful in decision-making, as knowledge without application is harmless. In short, knowledge is the foundation of intelligence, and intelligence is knowledge in action to solve problems.

Rothberg and Erickson (2004) argue that knowledge is static and ultimately only has value if people use it.

Choo (2002) defines Intelligence as a continuous cycle of activities that includes sensing the environment, developing knowledge, and creating meaning through interpretation, using the memory of past experiences to act on the interpretations developed.

Cultural intelligence refers to a general set of capabilities relevant to situations characterized by cultural diversity.

Theoretical arguments suggest that senior executives who are more culturally intelligent are better able to scan their environments for relevant and accurate information and use this higher-quality information to make better decisions and take more calculated risks (Ang et al., 2007).

One reason why CI increases job performance is that it results in better judgment and decision-making. An important cognitive outcome is cultural judgment and decision-making, which refers to the quality of decisions regarding intercultural interactions (Ang et al., 2007).

The development of Cultural Intelligence impacts Culture, in particular National Culture, as after all, the learning by comparison provided by this type of intelligence leads to the opportunity to review beliefs, values, assumptions, and traditions.

It is widely known that culture plays an important role in creating conditions for learning within internal and external environments.

In this sense, it is also important to analyze culture at the national level, that is, the beliefs, values, assumptions, and traditions of a given society.

Based on the previous theoretical foundations, the Culture-Knowledge-Intelligence (CCI) model is constructed, which is shown in Figure 1.

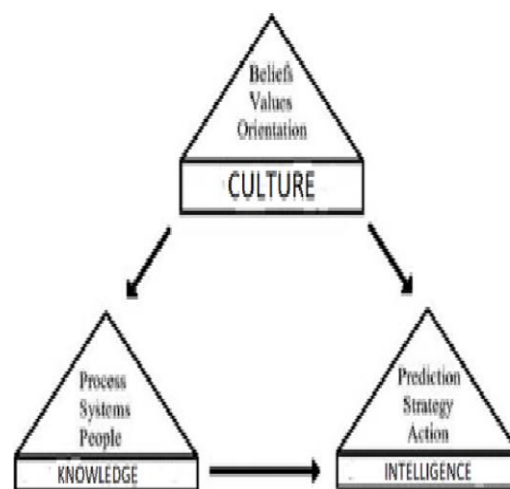


figure 1 The CULTURE-KNOWLEDGE-INTELLIGENCE MODEL (adapted from Choo, 1998)

The premises of the CCI model are:

(i) Culture is formed by the beliefs, values, assumptions, and traditions of a society (Shein, 1985)

(ii) The central argument is that, for education to succeed in its tasks, the curriculum as

its core must be restructured or reformulated around the four pillars of learning:

learning to know, learning to do, learning to live together, and learning to be (Nan-Zhao, 2000)

(iii) The three pillars of intelligence are: forecasting, strategy, and action (Rothberg and Erickson, 2004)

Figure 1: The culture-knowledge-intelligence model (adapted from Choo, 1998)

The CCI model is based on three assumptions (Table I):

Hypotheses	Sources	Results
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Culture has a positive impact on knowledge	The successful implementation of a knowledge management system hinges on a thorough analysis of the existing organizational culture (de Ré et al., 2017).	supported
Culture has a positive impact on intelligence	Culture shapes organizational and social behaviors, influencing how individuals think, make decisions, and respond in various situations (Schein, 1985).	supported
Knowledge has a positive impact on intelligence	Effective knowledge management is crucial for enhancing organizational performance, improving problem-solving capabilities, and supporting informed decision-making (Liebowitz, 2019).	supported

Table I. Premises of the CCI model

The CCI model showed the relationship between culture, knowledge, and intelligence. In the case of Public Health Consortiums, it became very clear that the cultural aspect becomes the most important to guarantee the processes of creation and application of knowledge. Many people end up not sharing what they know due to this cultural barrier. Therefore, a process of raising awareness about the importance of Organizational Knowledge Management is of utmost importance for the development of trust, engagement, responsibility, and especially honesty.

Consistent with the previous literature, the results of this study suggest that the development of an organizational culture (macro-level national culture) supports the application of knowledge management – KM practices (Davenport and Prusak, 2000; Nonaka and Takeuchi, 1995; Gold et al., 2001; Janz and Prasarnphanic, 2003; Lee and Choi, 2003; Donate and Guadamillas, 2010).

Some authors point out that organizational culture is not only a critical success factor for KM, but also the most difficult and important factor to address, especially if an adequate culture does not yet exist (Davenport and Prusak, 1998).

However, changing a culture in an organization or community is a formidable challenge.

The process of cultural change encompasses the following requirements:

1. people must be willing to cooperate (there must be appropriate incentives and rewards);
2. basic understanding of how KM can improve communication between farmers, academia, the private sector, and government.
3. networking to promote cultural change;

Culture also plays an important role in creating learning conditions with the internal and external environment.

Conclusions

The main conclusion is the importance of raising awareness among consortium members about Knowledge Management practices to build trust, facilitate dialogue, explore mutual benefits, co-produce knowledge, exchange experiences, promote participation, foster social learning, and encourage reflexivity. The interviews clearly reveal the need for a public education consortium linked to health consortia, given the limited knowledge of executive secretaries in both the health and management sectors. Some individuals are unaware that an auction is a specific type of bidding process used for non-usable goods, not for purchasing medications from the private sector. However, the biggest problem is political, stemming from the relationship between municipalities and the national government. The state, with its greater resources, often fails to recognize the importance of defining clear governance norms, ensuring equitable participation in decision-making, transparency in the distribution of benefits, and planning based on regional interests. This would prevent an excessive concentration of advantages for the state itself and a few larger municipalities with closer personal ties to the governor. Therefore, the importance of a collaborative governance model based on knowledge management practices, such as Communities of Practice, is evident. This model facilitates the exchange of knowledge and other resources, thereby enabling consensus-based decision-making. Regional inequalities stemming from the lack of resources in smaller municipalities (which receive limited federal funding and property taxes, and have few doctors and nurses) can only be remedied through the proper training and empowerment of consortia and their engagement with smaller municipalities. This will increase access to services provided by larger municipalities

(particularly hospitals). This collaborative governance model based on knowledge management practices is especially useful for Rio de Janeiro, which is experiencing real chaos in its health system as a result of the various arrests of governors and mayors during the two major sporting events (2014 and 2016), a situation that has not yet been resolved.

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Questionnaire applied to consortia
(<https://forms.gle/N9CNGRiZrBari7yP9>)

1. The main objective of the consortium is to reliably and collaboratively assess the quality of projects and services. Together, these attributes aim to reduce transaction costs associated with uncertainty and information asymmetry.
2. How do you assess the consortium's contribution to reducing regional inequalities in education?
3. To what extent does maximizing individual benefit (for each municipality in the consortium), as suggested by rational actor theory, harm the functioning of the consortium?
4. Operationalizing mutual trust and reciprocity (mutual support), based on the concept of social capital, is very difficult to measure in theory. How does this work in practice?
5. What mutual benefits can be obtained from participating in a network?
6. Does a high degree of responsibility, transparency, and autonomy eliminate the need for strict sanctions for deviations from work plans?
7. How do personal relationships and meritocratic considerations work within the consortium? Although consortium participants did not intentionally include socialization in their meetings, they stated that they built bonds through a shared understanding of the demands of the work.
8. Consortia specifically for teaching offer a forum where members learn from each other and facilitate shared programs, curricula, and projects that generate knowledge for the improvement of teaching practices. Could you comment on this point?
9. Some participants believe that forming subgroups is particularly useful when consortia are very large (10 or more members). Subgroups allowed members to work together to complete projects or achieve specific goals. What is your opinion?
10. It can be suggested that an important side effect of participating in consortia is the improvement of job

performance and satisfaction, as well as the reduction of professional burnout and staff turnover. What is your opinion?

11. Experiments with collaborative governance are often motivated by previous failures with adversarial or managerial approaches.

12. In the face of imbalances in resources and power between different stakeholders, how can we work with incentives for cooperation?

13 - Another common problem is that some participants may not have the skills and experience necessary to participate in discussions on highly technical issues. How can this situation be remedied?

14 - Collaborative governance requires a commitment to a positive strategy of empowerment and representation of the most vulnerable or disadvantaged participants. How does this process occur?

15 - The process created new personal and professional relationships, in addition to social capital among the participants.

16 - What were the main factors that determined its success?

17 - What were the main weaknesses of the process?

Ethical considerations: Regulatory institutions or other bodies have not raised any concerns regarding the integrity and transparency of the study, which follows the forms available here: https://cdn.who.int/media/docs/default-source/documents/ethics/informed-consent-for-qualitative-studies.doc?sfvrsn=1_2

However, the executive secretaries did not sign the form after answering the survey available here <https://forms.gle/N9CNGRiZrBari7yP9>, despite having promised via email to send it. Nevertheless, they did submit their answers to the questions via email, demonstrating their participation in the survey.