

## The health regionalization process from the perspective of the transaction cost theory

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**Abstract** *This study analyzes the incidence of transaction costs in the regionalization process of health policies in the Brazilian federal system. In this work, regionalized health actions contracted and agreed between federal agencies have assumed a transactional nature. A conceptual theoretical essay of reflective nature was prepared with the purpose of questioning and proposing new approaches to improve the health regionalization process. The main considerations suggest that institutional management tools proposed by the standards and regulations of the Unified Health System have a low potential to reduce transaction costs, especially due to hardships in reconciling common goals among the entities, environment surrounded by uncertainty, asymmetries and incomplete information, bounded rationality and conflict of interest. However, regionalization can reduce the incidence of social and/or operational costs, through improved access to health and the construction of more efficient governance models.*

**Key words** *Regionalization, Health policy, Unified Health System, Federalism, Health services*

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## Introduction

In Brazil, the configuration of health regions is institutionalized by the federative model in place, which conditions all the organization of the system. In this model, there are intrinsic controversial factors of intergovernmental competition and cooperation that influence the establishment of regionalized and hierarchical networks.

Since the beginning of the 1990s, the Unified Health System (SUS) has periodically published regulations that (re) created management tools in order to operationalize the regionalization of health actions and services. However, every time the federal government proposes a new tool, new hardships of adherence by the municipal and state managers emerge. In addition, the constant changes in management and governance tend to promote institutional insecurity, which can increase information asymmetries, uncertainties and, consequently, opportunistic actions, causing greater competition among the agents involved.

Regionalization is the organizational policy that guides decentralization of health actions and services and the negotiation and agreement process between managers in the three government levels and for which institutional arrangements and administrative political relations are variables that permeate planning, management and organization of healthcare networks<sup>1</sup>.

The configuration of regionalized healthcare networks, with cooperation between federated entities, implies the existence of flows of information and financial and economic resources resulting from the agreement between these entities through the celebration of incomplete formal and/or informal “agreements” that invariably make them less efficient.

In this context, the Transaction Cost Economics (TCE) can provide subsidies to the analysis of regionalization and agreement of healthcare networks and the current intrinsic costs. This study discusses the decentralization of regionalized healthcare networks from the Brazilian federative model and considers its impact on the efficiency of services provided in the light of the transaction costs theory.

This article uses the term “service” referring to the availability of several types of procedures/actions/activities in relation to healthcare and according to technological complexity (primary, secondary and tertiary care).

The first section of this article discusses health regionalization. The second section shows the

conceptual theoretical foundations of transaction cost and, finally, an analysis of the relationship between the factors determining transaction costs and Brazilian health system regionalization.

## Unified health system regionalization

Recently, Brazilian health regionalization presupposes understanding the decentralization of power granted by the Federal Constitution of 1988 (CF/1988)<sup>2</sup>, its interdependence with the *sui generis* typology of federalism implemented in the country and, finally, its implications in what concerns the specificity of the health policy. This is because, while the pre-CF/1988 federative system relied heavily on the relationship between the federal government and state governments, its replacement marks the growing importance of municipal governments, either as implementers of public policies by delegation and deconcentration of State power, or by its consecration as federative entity vested with full autonomy.

In Brazil, “municipalization at all costs”, to the detriment of the control and regulation exercised at state level of government, makes the process of agreement between government entities more cumbersome and complex, as well as deprives federal incentives for adherence to national and universal policies of their effectiveness<sup>3</sup>.

Dilemmas and conflicts of the federative organization are of a multiple nature, particularly where fiscal and management autonomy are combined with decentralization by service hierarchies, networking and different functions between governments, even more when associated to the population size and different public goods and services infrastructure supply.

SUS decentralization in the 1990s is marked by the process of transferring resources and competencies to the municipalities directly from the Federal Government, the main policymaker and financier of the health policy. This decade is also marked by the poor practice of cooperation mechanisms and disputes for more resources between state and municipal governments for the management of health services. In addition, the strongly municipalized government structure faces major challenges in meeting SUS goals in the face of the extreme diversity and inequality of the Brazilian federation.

Nevertheless, in the 2000s, the concept of regionalization was recovered to implement the “system rationalization to equate fragmentation in the provision of services and disparities

of scale and productive capacity existing among municipalities, at the risk of loss of efficiency and consequent worsening of results"<sup>4</sup>.

In this context, and as the main guideline of decentralization, regionalization is resumed as one of the fundamental pillars of the SUS toward structuring and organization of health actions and services. It is also characterized by the consolidation of a territorial basis for the planning and organization of regionalized and hierarchical healthcare networks that have distinct technological densities and health services and services supply capacities.

After successive publications of regulatory standards in the 1990s and 2000s, the regionalization policy was effectively rescued by the publication of the Pact for Health<sup>5</sup> in 2006. Actually, the Pact for Health is a continuation of proposals made by the Operational Health Care Standards (NOAS), which were highly criticized when they were published in 2001 and 2002. The Pact for Health gathers a set of institutional and political reforms that are agreed between the three SUS managers and aims to establish a new level in terms of financing, new definitions of responsibilities, health goals and to agree commitments among health managers with a view to organizing health care.

In 2006, with the launching of the Pact for Health, guidelines are recommended for the regionalization of the health system, based on strengthening the political agreement among the federated entities, especially in the municipal sphere, and on the national regions economic, cultural and social diversity in order to redefine health regions<sup>5</sup>.

Following the publication of the pact, the subnational entities had the opportunity to reestablish autonomy to define which services they would be able to provide and sign a term of cooperation through direct agreement between municipalities, states and the Federal Government. The pact took six years of negotiation and, when shyly implanted, was replaced by Decree nº 7.508/2011<sup>6</sup>. This fact demonstrates the constant changes to which agents responsible for the setting of the regionalized health care network are subjected, which leads to institutional insecurity.

In this respect, enactment of Decree Nº 7.508/2011<sup>6</sup>, which aims to consolidate the process of cooperative and supportive regionalization, also enables greater operational and institutional support to the structuring of healthcare models in the health regions of the healthcare

network. The important feature of this mechanism is the responsibility given to federative entities in order to generate an effective access to the population to goods and services offered by contractualisation through the Organizational Contract of Public Action (COAP).

### Transaction costs theory

Transaction costs are the "costs to plan, adapt and monitor compliance of tasks in productive activities", as well as those associated with poor adaptation of agreement conditions, possible renegotiations and monitoring of compliance with agreements<sup>7</sup>. In theory, the purpose of TCT is to analyze the conditions and consequences of transaction costs to the efficiency of the economic system<sup>8</sup>.

Among the several conceptions already explained by some authors in the literature, transaction costs are, in short, those written in the elaboration and negotiation of agreements, in the measurement and enforcement of property rights, in the performance monitoring and in the organization of activities<sup>9</sup>. They are also described as the cost of measuring the multiple valued realms included in the transaction and those related to contractual execution<sup>10</sup>.

According to Williamson<sup>11</sup>, transaction costs can be ex-ante, that is, drafting, negotiating and safeguarding the agreement, or ex-post, resulting from the adjustment and adaptations, which may even result in contractual disruption due to failures, errors or self-interest of one of the parties.

The relationship between transaction costs and governance is widely reported in literature. However, its meaning has been expressed by different connotations, which translate from organizational arrangements to a strategy and a way of governing<sup>12</sup>. Governance contemporary concept is no longer limited to state leadership, but also to direction of society through institutions and social stakeholders. Thus, governance refers to additional forms of social direction<sup>13,14</sup>.

According to Williamson<sup>11</sup>, the governance structure of a transaction is conditioned by its attributes, institutional environment and behavioral assumptions exerted by stakeholders involved. The author says that transactions vary according to their nature and size, which is expressed by the specificity of assets, uncertainty and frequency; and that the level of its manifestation implies different designs of efficient solution. In addition, he argues that limited ratio-

nality and opportunism interfere greatly in the conduction of a transaction<sup>15</sup>. Figure 1 shows the model based on a study by Zylberstajn<sup>16</sup>.

Opportunism resulting from the contractualisation process implies the recognition that agents not only seek self-interest, but also appropriate benefits associated with transactions, although the economic theory argues that agents behave in an unbiased manner in the pursuit of their own interests. Williamson states that opportunism is responsible for the real or apparent conditions of information asymmetry, that is, information is not available equally to the agents involved in a transaction.

As for limited rationality, Williamson<sup>11</sup> asserts that agents want to be rational, but they can only be so partially, since the environment surrounding their decisions is highly complex and affected by cognitive limits. In other words, limited rationality leads to the design of incomplete agreements, which will be subject to renegotiation and for which agents will, as a precaution, use safeguards and incentive mechanisms. From the standpoint of transactional efficiency, therefore, it is necessary to implement mechanisms to adapt to the permanent conflicting scheme in contractual relations<sup>17</sup>.

Williamson<sup>18</sup> addresses uncertainty in terms of complexity of the events, which was measured into three categories: the first – related to environmental contingencies, including the preference of consumers and/or users; the second – related to lack of information; and the third, strategic or behavioral – related to opportunism.

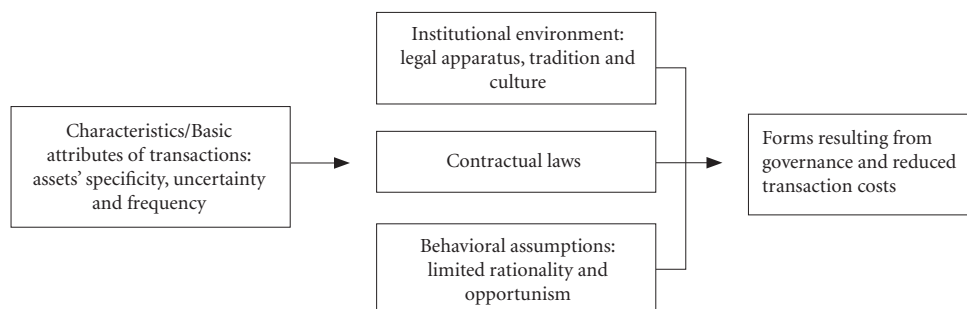
The frequency of a transaction allows the development of a reliable commitment between agents, leading not only to reduced costs associ-

ated with collecting information, but also to the elaboration of complex agreements, which, in the end, restricts opportunists' performance. Thus, "the greater the specificity of the assets, the greater the frequency of transactions and the greater the level of uncertainty, the greater the transaction costs"<sup>19</sup>.

When evidencing the registration of transaction costs, one has the dilemma of collective action, which, as yet another implication, highlights groups' performance, or even social classes, in relation to the (in) adequate current institutions in the perspective of self-interest.

The collective action dilemma was first described by Olson<sup>20</sup>, who unveils the social dilemma involved in the choice of decision-making interdependence circumstances, as well as postulates that rational and selfish individuals do not act naturally for the production of a good. On the contrary, the natural form, with a view to increasing benefits, becomes non-cooperation, or rather, the adoption of a free rider stance, in which the need for goods does not guarantee the realization of collective action because the free rider acts as inhibiting factor to the point of preventing groups actions. Also according to Olson<sup>20</sup>, the solution to the dilemma is blocking the free rider's behavior by charging a transaction cost higher than that incurred if it cooperated in the production of the good.

In summary, the transaction cost economy shows that hierarchical governance arises to solve the problems caused by limited rationality and opportunism in the midst of an uncertain environment and subject to asset specificities. Decision about the best coordination depends on the costs associated with the transactions.



**Figure 1.** Scheme of Induction of Forms of Governance.

Source: Zylberstajn<sup>16</sup>.

On the other hand, it also presupposes that in institutional environments surrounded by uncertainties, asymmetries and incomplete information, limited rationality, multiple objectives and conflict of interests, it is important to use a standardization tool, such as the preset of incentive and control tools, which includes the assignment of premiums, the application of sanctions and fines or audits.

In general, transaction costs are invariably related to productive efficiency, as it reflects the behavioral patterns of agents and the way in which economic activities are organized and coordinated. In other words, reduction of transaction costs is obtained by both agents and organizational formats.

### **Transaction costs in the context of federalism and health regionalization**

The issue of transaction costs has not yet been debated in the process of health regionalization in Brazil. The recurrent theme has been applied to the private health sector, especially when considering health insurance companies and health plan operators<sup>21</sup>.

For the analysis of this context from the perspective of the TCT, the action or the health service (own/contracted and agreed) such as the transaction between the federated entities will be considered, which will provide elements of comparison and discussion on the best governance structure to organize it among the different agents that work in public health management.

Chart 1 highlights transaction characteristics, which are accepted hypotheses to guide the analysis process. The specificity of assets involved in health services is high and physical structures and the mobilization of human capital are especially complex.

There is great adherence of TCT to health actions and services, considering that all the main assumptions of TCT are within the scope of health regionalization. One should not forget that all rules and regulation of health actions or services involves an institutional conformation that is susceptible to uncertainty, as well as opportunistic practices. In general, what directs the attribution of a high specificity of the asset is the understanding that the health actions or services at the regional level involve complex procedures.

According to the aspect discussed here, transaction costs are higher or lower depending on the greater or lesser efficiency in the agreement and/or contracting of health services between

the federated entities. Thus, the TCT applied in the regionalization of the Brazilian health system can be understood from a general definition that these arise because of the cost of measuring the multiple realms valued and included in the transaction<sup>10</sup>. This is because, in health regionalization, both the transaction costs arising from cooperation/competition and coordination between the federated entities and those resulting from contracting are of interest in the discussion.

In order to stimulate reflection, the question of transaction costs' incidence will be addressed under two different realms, namely, that of federalism vis-à-vis regionalization and that of establishing a health care network vis-à-vis contractualisation, considering the behavioral assumptions, the attributes of the transaction and the governance structure. To that extent, the transaction's efficiency is given by the user's access to comprehensive and quality health care in the perspective of a better institutional arrangement.

Anchored in the study by Axelsson et al.<sup>22</sup>, the premise of the realm of the analysis that considers the processes of regionalization and (de) centralization is that the historical trend of the establishment of the health system determines how and where the transaction costs apply and how these, in a "two-way street", determine or are determined by governance structures.

From the conceptual theoretical foundations, it is possible to discuss how the attributes of the transaction and the behavioral assumptions can interfere in the incidence of transaction costs in the setting of health networks from the regionalization process, considering the peculiar Brazilian federalism.

Chart 2 shows the federative duality to which the regionalization process of health services is subject. In general, positive effects lead to reduced social and / or operational costs through the provision of better quality health services, while negative effect affect social and operational costs and generate an increase in transaction costs. In other words, the conception of health regionalization is imprinted with the idea of reducing social and/or operational costs associated with greater efficiency in the provision of health services. However, the incomplete nature of contracts, assets specificity and opportunism can truly be observed in the agreement among the federated entities, which generate, to a greater or lesser extent, transaction costs. These costs are higher in regions where the negative impacts overlap with positive ones, thus their incidence can be considered extremely subjective, depend-

**Chart 1.** Transaction Characteristics Matrix.

Transaction	Transaction realms			Assumptions about human conduct	
	Assets' Specificity	Uncertainty	Frequency	Limited Rationality	Opportunism
Health action or service within health regionalization	High	High	Recurrent	High	High

Source: Prepared by authors (2016).

**Chart 2.** Federative duality and impacts on regionalization.

Federalism/ Regionalization	Federative Duality			
	Cooperation		Competition	
Impacts	Positive Impacts	Negative Impacts	Positive Impacts	Negative Impacts
Health Regionalization	Reconciliation of regional collective interests	High dependency between federated entities	Greater qualified productive force and specialized services offer	Political Party and fiscal dispute
	Optimization of the use of resources (greater distribution in the provision of health services)	Lack of tools for the establishment of intergovernmental agreements	Search for innovation and performance in management	Fragmentation and volatility of regional interests; Inequality in the capacity to offer health services
Results in transaction costs	Reduced social and operational costs	Higher transaction costs	Reduced transaction costs	Higher transaction costs

Source: Prepared by authors (2016).

ing on conciliatory mechanisms among the federated entities.

The high incidence of norms and regulations implemented during the last years demonstrates the complexity and specificities of assets, associated with a certain level of uncertainty related to the regionalized provision of actions in the health services.

Thus, the implementation of the Pact for Health<sup>5</sup> in 2006 and the enactment of Presidential Decree No. 7508<sup>6</sup> in 2011 led to the establishment of two contractual agreement instruments – the Management Term of Commitment (TCG) and the COAP, respectively, which provide that the analysis in relation to the object of the study be directed effectively in the perspective of the

per se contractual relation and that addresses the issue from the inherent characteristics of federalism – competition, cooperation and coordination. It is important to highlight that TCG, while being a contracting strategy between federated entities, by reinforcing the accountability of municipal managers regarding access to health actions by the population, upheld the autonomy of municipalities regarding the definition of their policy.

Faced with the regionalization process, costs are impacted by the asymmetry of forces between the federated entities, the imbalance of powers and political, legal, technical, administrative and financing-related asymmetry, and, thus, this increased asymmetry hinders institutional coop-

eration and propitiates the “free rider” attitude, stemming from the impossible coordination of a collective action.

Despite the analysis of norms, resources, incentives and cognitive constructs that are part of regulatory actions in the process of health regionalization, the institutional framework observed in most states is incipient. Certainly, this evidence suggests a reexamination in light of an analysis that qualifies the possible sources of transaction costs, as well as, consequently, in the state health regions.

In theory, the *per se* design of intraregional transactions resulting from agreements already implies *ex-ante* transaction costs; after all, the exercise implemented at this stage requires a range of information for which symmetry is indispensable. It should be noted that these costs are admissible. On the other hand, *ex-post* costs related to the normalization of the agreement in adaptation or adjustment-related periods, which are generally the result of institutional flaws, are undesirable and should be at least minimized, if not abolished.

The establishment of an agreement where agents have full knowledge of the information is a non-feasible condition. To this extent, information asymmetry, particularly uncertainty, arising from the lack of information related to the attitudes of the other party, not only reinforces the opportunistic behavioral assumption, but also the limited rationality, which, in synthesis, leads to the elaboration of an incomplete agreement that may ultimately lead to a contractual breach.

Considering the above, and according to an evaluation by Schneider et al<sup>23</sup>, several factors contributed to the appearance of the behavioral assumptions and basic attributes of the transactions in relation to TCG. Authors argue that, by not complying fully with the mission it was designed for, mainly in relation to the coordination with the Regional Management Board (CGR), the Bipartite Interagency Committee (CIB) led to competition between municipalities for greater resources and increased delegation of functions from a given municipality to other municipalities in the region, which characterizes the free rider stance.

Although as a mere speculation and with a prerogative of reducing transaction costs, the COAP's implementation should focus mainly on the regulation of the opportunistic behavior of the federated entities, since misused resources in a municipality or a health region give rise to inefficiency in the system as a whole. If one or a few

municipalities stand out positively as to efficiency, they may induce an opportunistic behavior of the others, since it will pass on health system costs to the region as a whole and, as a result, reduce the generation of benefits.

COAP's regulation presupposes the induction of cooperative behavior, even via possible incentives. If cooperation does not prevail, there are still solutions through coercive sanctions. Thus, in order to avoid imposing a coercive situation – which is undoubtedly not desirable – it is essential to consolidate a strong health governance in the health region in order to reduce the implementation of envisaged sanctions.

### **Health care networks and contractualization versus transaction costs**

Faced with the multiple functionality of the health care services network and the heterogeneity of stakeholders and interests, a complex governance structure must be surely consolidated. Moreover, conforming this network may impose a significant transaction cost, since there is invariably asymmetric information between the federated entities, as well as contracts and agreements that could not cover all the complex relations between the various agents that are part of the health care network<sup>24</sup>. The challenge, however, is to reflect to what extent maintenance of the network will also incur high transaction costs, as well as the extent to which elevated transaction costs will lead to the non-feasibility of its effective establishment, noting that transaction costs are not to be confused with operating costs, but rather with costs of making the health care network efficient.

The ordering of the process of regionalization, agreement between managers and integrated planning is based on SUS management tools, the Regionalization Master Plan (PDR) and its complements, the Investment Master Plan (PDI) and the Integrated Agreed Programming (PPI), which can include the notions of territoriality and the establishment of health systems, which aim at optimizing the use of physical and financial resources and consequently facilitates the population's access. In practice, with rare exceptions, such tools are merely fictitious management devices, namely: the PDI does not even have financial lines in public budgets; and PDR and PPI work on paper, but when they involve personal relationships, whether of government/political stakeholders or service professionals and even population dynamics, their implementation

is much more complex and agreements are rarely effective.

These specificities can become a source of transaction costs (reinforcing the negative impacts on health regionalization, shown in Chart 2), since the existence of fictitious management devices can generate opportunistic practices by agents with greater political power.

These tools are strengthened in the Pact for Health<sup>5</sup> and aim to empower the federative decentralization process of the SUS, recognizing the great regional differences, facilitating the reflection, and planning of the needs to achieve greater resolve in Primary Health Care (PHC) at the regional level and medium and high complexity in the macro-regional context.

According to Ordinance nº 399/2006 of the Ministry of Health (MS)<sup>5</sup>, health regions are territorial clippings identified by municipal and state managers and approved in the BICs, according to social, economic, cultural, transport infrastructure characteristics, among other variables that can be aggregated<sup>25</sup>.

In this context, we highlight the regular functioning of the CIBs, consisting equally of State Health Secretariats (SES) officials and representatives of the National Council of Municipal Health Secretariats (CONASEMS); and of the Tripartite Commission (CIT), consisting of representatives from the Ministry of Health, the National Council of Health Secretaries (CONASS) and CONASEMS, which, since in the late 1990s, were fundamental to the decentralization of the SUS and managers' understanding of their own federative responsibilities. It is worth mentioning that, during this period, CIBs and CITs approved the management modalities and healthcare goals of municipalities and states.

Reconciling the interests of a broad and heterogeneous group of agents is complex and increased efficiency is unlikely, generating to some extent transaction costs. Thus, the construction of mechanisms that provide greater institutional, and even legal security would make transactions more efficient; in other words, it would allow greater cooperative efficiency between the federated entities and, consequently, lower social and/or operational costs.

SUS planning and management initiatives are supported by these commissions, which gather the diverse demands of government spheres at a negotiating table and deliberate on the direction of SUS decentralization and operationalization. These settings are important innovations of the Brazilian federative model; they equalize the representation of interests of the three spheres of

government in the decision-making process. Attention is drawn, however, to the power play between spheres, especially among municipalities, which can lead to the disruption of managers.

Taking the current legal instrument as a reference of the institutional complexity in the establishment of regionalized and hierarchical health care networks, COAP is the instrument of collaborative and solidary agreement to organize and integrate health actions and services, defining responsibilities, indicators and health goals, performance evaluation criteria, form of control and inspection of their execution and other elements necessary for the integrated implementation of health actions and services<sup>6</sup>.

It is expected that this legal instrument for the planning and management of health care networks will enable greater interconnection and integration between the regional health services so that the different levels of technological densities, physical structures and human resources are coordinated and distributed as facilitators of access to health. In this agreement, CIRs are the management bodies and must act as integrators of regional policies.

According to Chart 1, we can classify the relations of cooperation between agents as a specific asset whose complexity is an impact factor in the evaluation of transaction costs in health regionalization and particularly in the establishment of health care networks.

With respect to opportunism, considering the hypothesis that this is a characteristic of economic agents, both complex agreements with possible gaps, omissions and errors, and obligations agreed within the health regions can be either disregarded by the agents, in case of no interest in the transaction, or else it will require adaptations to maintain the relationship between the parties<sup>26</sup>. This consideration must be addressed not only in the perspective of the relationship between federated entities, but also in the relationship between public and private entities.

Limited rationality, another aspect to be considered in the establishment of health care networks, is not only due to incomplete information, but also to the lack of agents' cognition, which leads to misprocessing in relation to a more efficient transaction; this is particularly aggravated by uncertainty and opportunistic behavior. In other words, limited rationality influences opportunistic behavior and hampers investment decisions on specific assets.

The recurrence/frequency of transactions leads to a level of reliability between the parties<sup>26</sup>. However, as can be observed, the complex con-



stitution of tools for implementing plans and agreeing on health goals, together with the constant changes in the institutional setting prevent greater reliability among the federated entities and, consequently, impact on the level of efficient construction of the regionalized health care network.

### Final considerations

In this study, health actions and services were assumed as analysis category for the evaluation of the health regionalization transaction cost. The importance of knowing and recognizing this cost toward achieving the best possible performance regarding the management of common interest functions in the covered regions brings to light, among other factors, the need to introduce vertical or horizontal integration, or even the consonance of both, the new coordination of cooperation agreements between the federated entities and the establishment of collective action coordination, particularly because, in terms of distributing benefits produced, information symmetry and negotiation conditions, the representation of citizens' interests, the implementation of agreements and, consequently, the lack of transaction costs presuppose theoretical circumstances that hardly occur at individual level or simultaneously.

Health regionalization requires the establishment of complex arrangements within intergovernmental and intraregional relations, and, thus, it is imperative to institutionalize robust governance structures with adequate incentives that address both autonomy and cooperation and/or competition, as well as management with a view to achieving objectives of common interest.

This study did not pretend to qualify all the sources of transaction costs incurred in health regionalization, but to indicate the main factors that influence the incidence of these costs. In general, the broad institutional construction implemented during the last two decades hampers the definition of solid governance models that reduce information asymmetries, uncertainties and opportunistic practices of certain federated entities.

The agreement and establishment of regionalized health actions or services, as set by the federative model, shows positive effects that improve efficiency in the provision of services and reduction of operational costs, through the specialized

supply of health actions and services between the different agreeing agents. These impacts can be quite broad, with emphasis on the qualification of the supply, in the constant search for innovations and management performance, as well as conciliation of regional collective interests.

However, this same model may have negative effects, in particular due to the lack of tools for the establishment of intergovernmental agreements. Thus, the creation of a governance model that shows adequate legal and institutional security can improve efficiency in the health regionalization process and, consequently, considerably reduce transaction costs.

Another negative impact worth mentioning are political-partisan and fiscal disputes. This is difficult to solve, since it involves a large variety of interests. Fiscal disputes, also understood as mechanisms for financing health actions and services, can be reduced through governance models that improve allocative efficiency.

In short, the construction of an institutional environment that provides greater security for cooperative actions among agents is essential to improve the health service delivery network, especially to ensure a certain stability in the definition of financing sources with financial and economic responsibilities for each federated entity.

### Collaborations

LG Sancho and DS Geremia participated in the design and outline of the study, writing the paper, drafting the preliminary version, critically reviewing and approving the final version. S Dain participated in the design, critical review and approval of the final version. F Geremia and CJS Leão participated in the writing of the paper, critical review and approval of the final version.

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