Regulation of care in care networks: the importance of new technological arrangements

Regulação do cuidado em redes de atenção: importância de novos arranjos tecnológicos

Abstract

One of the biggest challenges for health systems is ensuring full access. Regulatory processes in Brazilian healthcare prioritize the organization of waiting lists and care dynamics with a normative character, but distance themselves from the needs of users in the sense of a production of comprehensive care. In this qualitative study, the implications of health regulation in the production of care in the municipality of São Bernardo do Campo were analyzed, using the techniques of participant observation, focus groups and guide users, constructed from a cartographic process. Technological arrangements were identified in three scenarios: Regulatory Complex, Network Observatory and Network Support, which could be seized jointly by administrators, workers and users. The technological arrangements related to the matrixing of pulmonology and the line of care of musculoskeletal pain allowed the analysis of the relationship between the actions of regulation and care in such networks. The study concluded that regulatory actions were able to produce user-centered care, which the Regulatory Complex acted in an adjunct manner in ensuring access and that regulatory mechanisms in health services enhanced a regulation that produces care in care networks.

Keywords: Integality in Health; Health System; Health Regulation; Healthcare Networks.

1 This study was funded by the National Council for Scientific and Technological Development (CNPq).
Resumo

Um dos maiores desafios para os sistemas de saúde é a garantia de acesso integral. Os processos regulatórios em saúde no Brasil priorizam a organização de listas de espera e fluxos assistenciais com caráter normativo, mas se distanciam das necessidades dos usuários no sentido de uma produção de cuidado integral. No presente estudo, de caráter qualitativo, analisou-se as implicações da regulação em saúde na produção do cuidado no município de São Bernardo do Campo, utilizando-se as técnicas observação participante, grupo focal e usuário-guia, construídas a partir de um processo cartográfico. Foram identificados arranjos tecnológicos em três cenários: Complexo Regulador, Observatório de Redes e Apoio de Redes, que puderam ser apreendidos em conjunto com gestores, trabalhadores e usuários. Os arranjos tecnológicos relacionados ao matriciamento da pneumologia e à linha de cuidado da dor osteomuscular permitiram a análise da relação entre as ações de regulação e a produção do cuidado em redes. O estudo concluiu que as ações de regulação foram capazes de produzir cuidado centrado no usuário, que o Complexo Regulador atuou de forma coadjuvante na garantia do acesso e que os mecanismos regulatórios nos serviços de saúde potencializaram uma regulação produtora do cuidado em redes de atenção.
Palavras-chave: Integralidade em Saúde; Sistemas de Saúde; Regulação em Saúde; Redes de Atenção.

Introduction

The Brazilian National Health System (SUS) has integrality, universality and equity as fundamental principles in its health care networks. Cecílio (2001) considers integrality as a way to organize health care to listen to and fully meet people’s needs. The perspective of expanded integrality imposes on the system the ability to recognize inequities and in turn contribute to equity. A health system that guarantees quality access, that is, necessary care in due time, also advances in the construction of universality as one of its fundamental principles. Healthcare networks were organized considering universality and equity, aiming at ensuring integrality, access and continuity of care (Magalhães Junior, 2014).

Although healthcare access is a right that arises from the institution of the modern liberal State, the guarantee and effectiveness of such right through public policies vary within each society, influenced by interests and relations with other states and international organizations (Mattos; Baptista, 2015). This produces a tension: health as a right or as a consumer good, universality versus focus, social needs versus market interests. In this scenario, the need for regulatory actions for states emerges. The greater the guarantee of social rights – made universally available in permanent tension with the market – the greater the need of the State to exercise regulatory actions (Bahia, 2005).

In Brazil, health regulation was described as a national policy through Ordinance No. 1,559 of August 1, 2008 (Brasil, 2008), but it was already implemented, in practice, long before that. Before the establishment of SUS, a period in which there was already an important participation of the private sector within the Brazilian public health, regulatory actions occurred in the commercial, administrative, financial and care-related spheres. During this period, called inampiano (Carvalho, 2001), the system was organized from a market logic, generating revenue for the private network providing services via procedures, while care regulation was put into the background. Its focus expense control; through a normative arsenal, it prioritized control actions, with low effectiveness. Guarantee of access and the production of care were not prioritized in this regulatory logic.
The Pact for Health proposed through Ordinances MS/GM No. 399/2006 and MS/GM No. 699/2006 (Brasil, 2006) allowed a new opportunity for political discussion of interfederative relations in the construction of SUS, with emphasis on regionalization, financing, decentralization and regulation. The need to reaffirm existing pacts and build new agreements has spread throughout the nation the discussion on regulation for the construction and consolidation of such pacts.

Since 2008, the National Regulatory Policy has attempted to broaden the concept of regulation and collaborate to structures called “regulatory complexes.” Since then, three dimensions are at work: regulation of health systems, regulation of health care and regulation of access to care (Brasil, 2008). This concept was reflected in the proposal by the World Health Organization (OMS, 2000), which reduced regulation to find an appropriate care alternative in a timely manner. The emphasis attributed to the Regulatory Complex reinforced the role of access regulation, which, although fundamental, is not able to do so in isolation, with integrality and equity. In addition, the need to integrate the Regulatory Policy with other health policies, such as primary care, hospitals, emergency care and health networks is fundamental.

Since the signing of the Pact for Health in 2006, the process of building the regulation of healthcare in SUS has been organized, specially considering its fragility amid tensions between the guarantee of the universal right to health and market interests. In addition, the constant attempts by the private sector to maintain and expand its participation within the public sector is an important consideration (Ibanhes et al., 2007). The current challenge is to overcome the regulatory relationship merely as rule-setting (Carvalho, 2013) and to consider the principle of integrality as a guideline for regulatory actions.

Contrasting the historical construction of SUS and the regulation policies in Brazil, we might perceive the reasons that strongly support such protocols and regulations and its execution through bureaucratic processes. This, however, should not lead to the loss of singularity in the production of health care for each citizen and the advancement in the integrality of the health system.

The multiple definitions that the concept of health regulation received during the construction of the SUS dialogue with the way the regulation itself was being structured, crossed by the interests that marked the production of health policies and the values defended by them. Santos and Merhy (2006), based on a literature review on the subject, highlight some ideas related to the use of the concepts of regulation: control, balance, adaptation and direction. These would be called fundamental ideas, which would unfold into “related ideas,” so that control appears linked to the ideas of adjustment and rule; balance associated with correction and conservation; adaptation to interaction and transformation; and, finally, direction, negotiation and command (Oliveira; Elias, 2012). Control and balance appear related to more operative factors of the regulatory process, and give the idea of actions of care regulation or regulation of access, which approach the daily functions and processes more stiff and normative. The concepts of adaptation and direction, especially the latter, highlight the political nature of regulation and the involvement of management in processes, especially decision-making and the exercise of power (Oliveira; Elias, 2012).

Santos and Merhy (2006) contribute to two other terms, widely used to define regulatory processes and to differentiate them: microregulation and macroregulation. The first is linked to people’s daily access to health services and consumption. The second concerns the definition of the institutions’ more general policies, related to strategic management mechanisms.

Recently Cecílio, Carapinheiro and Andreazza (2014) conceptualized four regulatory regimes: the governmental, the professional, the clientelistic and the lay, who emerged from field research and presented regularities that allowed this characterization. For this, the authors relied on Weber’s concept of “ideal type” to propose typologies for each of the regimes, but also faced the tension that this path produced, since regularities were often crossed by an “extreme diversity of arrangements, solutions, compositions and recompositions” (Cecílio; Carapinheiro; Andreazza, 2014, p. 92) that put in check all this typology. The
definition of lay regulation is based on the absence of technical knowledge, unlike other regulatory regimes that often act from technical knowledge. However, the user’s “advisable knowledge” was considered, which promoted displacements in hegemonic thought, making room for the experience of illness, fear and fragility.

The user makes their own path through the network, and as much as managers and workers have difficulty recognizing this, it is a possibility of producing life further connected to what the users want for themselves; it is also an attempt to cross rules so rigid that, instead of allowing for access, they produce barriers (Bertussi et al., 2016).

The expansion of regulation concepts beyond the normative and formal aspects is related to an attempt to weaken its bureaucratic and controlling role and to allow for an approximation to the production of care, without damages to regulation, but with better integration between access, integrality and equity in healthcare.

This study aims to analyze how regulation in network management, from the integrality perspective, has been producing care; going further than a merely formal and bureaucratic regulation, which would only manage waiting lines and information systems.

Methodology

The research was conducted in São Bernardo do Campo, a large municipality in the Metropolitan Region of São Paulo, between 2015 and 2016. This is a cartographic study whose main objective is to analyze the ability of the regulation of care networks to produce live care in action. Therefore, we analyzed scenarios of municipal management whose choice was made in conjunction with managers, workers and researchers, who chose to focus on those in which the theme of network regulation was more evident.

Throughout the cartographic research, that allowed the observation of multiple actions carried out by the municipality, three scenarios were identified with a relationship between the regulation of networks and the production of care: the Municipal Regulatory Complex, the Network Observatory and the Network Support.

The Municipal Regulatory Complex was the first scenario analyzed. A focus group was conducted with workers and managers with trigger questions that approached the general objective of the research. From the analysis of the collected material, other possible scenarios were identified, such as the Network Observatory, which allowed mapping the matrix of pulmonology and the identification of the guide user. The third scenario, which emerged from the second, was network support and the structuring of territorial physical therapy in the line of care for chronic musculoskeletal pain. In this scenario, participant observation activities were carried out, including managers, workers and users.

The identification of the guide user occurred with the members of the network observatory; this patient was considered ideal as he carried a chronic disease, he is a frequent user of several points of attention of the network and is inserted in health actions identified as “technological arrangements,” such as the matrix of pulmonology. It was possible to monitor the movements of the care network management from the guide user. The practice in the field, conducted by himself, led to field notes that were presented and processed by researchers of the National Network of Shared Evaluation (RAC), developed by the Observatory of Public Policies in Health and Health Education of the Universidade Federal do Rio de Janeiro (UFRJ) and the Faculdade de Saúde Pública of the Universidade de São Paulo (Jorge; Moebus, Moebus, Moebus; Silva, 2016). The RAC analyzed, in several Brazilian municipalities, access and integrality of care in the articulation between primary care and specialized care, seeking to include who does, who asks and who uses health services. The research converged, especially in the cartographic aspect of the methodology and in the centrality of the user as an analyzer of the effects produced by the organizational arrangements of attention. The cartographic approach allows monitoring processes in depth, giving visibility to variations and deviations produced in daily healthcare (Passos; Kastrup; Escossia, 2012).

According to Tallemberg (2015), cartography is primarily about mapping effects in the same way the landscape is experienced; as such, this was the reason for this approach, as the study
of organizations and health work is complex and presents great methodological challenges for the investigative processes. Among the multiple production plans, the ones related to care are particularly complex, as its action takes place from the initial encounter, often enabling the capture of traces. (Feuerwerker; Merhy, 2011).

During cartography, the main objective is to capture the delicacy of micropolitical processes and the uniqueness of actors and events experienced by users. Developments in the research field provided experiences captured both with “retinal eye” and by Rolnik’s vibrating eye (2006), capable of perceiving the subjectivity, affections and intensity.

The project was submitted and approved by the Research Ethics Committee of UFRJ, with opinion no.: 560,597 of 23/03/2014.

Results and discussion

The cartographic course followed three scenarios of work organization involving regulatory actions, with the objective of promoting access and comprehensive shared care. The study started from the Regulatory Center, in the Municipal Regulatory Complex, where it was observed that the work process was reduced to management of the waiting list, scheduling and the computerized systems, among others. After the gathering of the focus group with managers and workers of the Regulatory Complex, we observed work processes marked by a bureaucratic perspective, distanced from that of the user and from in-action healthcare. The search for processes with emphasis on network care management leveraged the research to other types of living care in action, after understanding the organization from the Regulatory Complex and its performance using predominantly hard technologies.

The second scenario included in the study, the Network Observatory, is classified as a technological arrangement of care, which was developed through monthly meetings with managers from all points of attention in the municipality, using and analyzing emblematic situations and cases related to the care network as a whole, with emphasis on its articulations and the caregiver process developed with a focus on the user.

During the mapping of the Network Observatory, major cases in the network were analyzed; these called into question the integrality of the care network established in the municipality due to their health needs. A specific case was then identified and chosen as a guide user as he was a chronic disease patient and frequent user of the network, and thus could show the articulation of the care network from his own experience as a user.

Another relevant aspect of the choice of the guide user was the fact that he was enrolled in the matrix of pulmonology, a technological arrangement used by the municipality as a way of regulating the waiting list for pulmonology.

Matrix support, described by Cunha and Campos (2011) as an arrangement to minimize the fragmentation of care, strengthen multidisciplinary action, clinical accountability and regulation of care networks, has been used in Brazil and other countries (Oliveira; Campos, 2015, p. 232) as a strategy to bring primary care and specialized care closer. The proposal of matrix support of pulmonology arose from the need to respond to a large number of users waiting to access this specialty.

Considering the insufficient appointments and the accumulated demand, the work among specialists and primary care began, having as its starting point the review of all referrals to pulmonology, in an attempt to identify the most frequent reasons for derivation, providing clues about the most prevalent respiratory diseases and the limitations of the primary network in the management of these diseases. Subsequently, the professionals responsible for conducting matrix support updated the network professionals regarding the most frequent injuries identified – chronic obstructive pulmonary disease (COPD) and asthma. After this stage, protocols were established for the referral of new patients to the pulmonologist. Only severe and/or difficult-to-manage cases should be referred from the protocols, while the others could be cared for in the basic network itself, which began to rely on shared appointment activities, in which the specialist, with a previously defined agenda, attended the patients together with the general practitioner, clarifying doubts and sharing experiences. In addition, the specialist had direct contact with the health teams of the basic network,
facilitating communication and providing support for monitoring users. The guide user had COPD and was enrolled in the matrix of pulmonology and being cared for in a shared way between primary and specialized care. He guided the researchers on the difficulties of access and the possibilities of healthcare that were offered, as well as their interaction with service and regulation in the network.

Although the Network Observatory produced discomfort and displacement in its users, it highlighted the interaction between the network points effectively, as described by Bertussi et al. (2016, p. 263):

the network learned that it is necessary to truly communicate with itself and with its users. With the radar in function, several situations that require networking all the time began to be identified, knowing that the challenge was to sustain the network simultaneously for so many users, when new situations are identified all the time. Network is a production. Shared care is a production. Regulation only makes sense if it is designed to produce connections and if it is associated to the production of care.

In general, it was possible to observe the capillarity of matrix support in primary care and at other points in the care network and in management. However, the distancing of the emergency services and hospital care in the network were determinant, allowing for ruptures in the continuity of care. The importance of direct participation of central management in the mobilization of all services was clear, since the usual fragmentation of services and care arrangements favors disputes instead cooperation (Baduy et al., 2011).

In this sense, it is worth noting that the guide user, despite several unmet needs from the point of view of comprehensive care, had access to cataract surgery, scheduled by the Regulatory Complex, which indicates that procedural logic can produce fragmentation.

Thus, it was identified that it is not enough to produce a change in the work processes of regulation; deconstruction also involves specialized attention, identification of professionals willing to act under a different logic, and, above all, to participate in the collective construction of the production of care in a shared network. This was how support matrixes were built in specialties in which the difficulties of the primary care teams were well-defined (Bertussi; Feuerwerker; Louvison, 2016).

The third scenario was Network Support, in which the municipality acted as a supporter that moved workers at different points, placing them in connection for healthcare in different situations. The network supporters presented the line of care for chronic musculoskeletal pain; its structuring occurred from the internal realization that the unmet demand for orthopedics and physical therapy would never be overcome if there were not another supply logic. Based on the identification of this problem, municipal management teams decided to discuss with workers from the five territories with highest accumulated demand - that is, managers from Basic Health Units (UBS) and network supporters, Specialized Rehabilitation Centers (CER IV) and the management team from the Municipal Health Department - all accumulated demand for orthopedics and physiotherapy.

From this data, it was possible to identify important difficulties: many referrals for orthopedic appointments, rheumatology and physical therapy and an insufficient supply of specialties and the triad of drugs for chronic pain: anti-inflammatory drugs, corticosteroids and analgesics. There was also a small number of groups of chronic pain spread throughout a few units; integrative practices offered in a disjointed way from the line of care of chronic musculoskeletal pain. As such, the physical therapy service had little dialogue with the territories, and most referrals for physical therapy were related to chronic low back pain. In summary: no offers capable of responding to the needs of users were made, and patients were left on hold for a long time and received fragmented, little-singularized and insufficient care.

Network supporters as well as workers reflected on the needs of users and what types of responses they could produce in a decentralized way. The workers of the territories brought different offers that could be articulated for the network composition: Liangong (Chinese body practice, seeking to restore the body’s natural movement
and alleviate pain), acupuncture, auriculotherapy and physical activity groups (carried out with the Sports Department for proper physical practice).

The main novelty proposed was the presence of a physical therapist in the territory, with the purpose of expanding and decentralizing care in cases of moderate complexity, aiming at a closer access and continuity of care to COPD. The expertise of this professional integrated to the primary care team was then sought, diversifying actors and responses to accumulated demand, qualifying the waiting lines and developing notions of self-care that could be incorporated into the users’ daily lives, preventing them from waiting for new care after the end of physical therapy sessions.

The organization of the line of care took place from the territory, with three addressed modalities of pain (upper limbs, lower limbs and spine). Inclusion criteria was applied after the individual evaluation of the patient by the professional. After the evaluations, the groups were formed in the health units of the territory and each patient would participate in the activities developed in ten sessions. After this intervention, there was a new evaluation to verify the need for continuity or the possibility of follow-up at home or referral to other activities in the territory.

Although the strategy of territorial physical therapy was an important movement to deal with the accumulated demand, it was essential to reorganize the process of shared networking to manage chronic musculoskeletal pain. For this, it was essential to have a communication network between specialized outpatient regulation, primary care teams and teams from the central polyclinic and specialized rehabilitation center to avoid further accumulated demand.

The focus of the work had been to diversify and decentralize offers that would avoid referral, because they responded to the need of users in services near their home. Continuity of this process with specialized care pointed to the need to discuss the orthopedics, rheumatology and physical therapy protocols of the municipality, in order to articulate and integrate the professionals’ activities.

Articulated action between different areas of health care, despite being an increasingly common strategy in daily health services, is not immune to disputes. It may encounter various difficulties, which includes willing collaboration among workers of different services.

The third scenario, in summary, presented a powerful technological arrangement, which started from the need to act in the waiting lines of the Regulatory Complex and produced other arrangements capable both of minimizing waiting lines, as well as of promoting pain relief, developing the users’ autonomy in relation to self-care and acting as a positive model of network articulation.

It is important to point out the limits of this expanded construction; it is not necessarily possible for the whole system to work with the most complex cases, which might require communication between all services in the care network. Although the technological arrangements of regulation analyzed have fulfilled the role of ensuring access to the specialty, the insufficient articulation of the services did not allow adequate visibility of the case in question, nor sufficient supply for all needs. The guide user of this study, with severe pneumopathy, died at the end of the research, after several days of hospitalization in an Emergency Care Unit different from the one located in front of his house, which he referred to as his “pub.”

**Final considerations**

The research allowed us to capture the existing regulatory movements beyond the Municipal Regulatory Complex. Despite its predicted role, especially in the National Regulatory Policy, which places central management as the protagonist of regulatory actions, throughout the study the Regulatory Complex presented itself as an adjunct, responsible for creating conditions for finer and more innovative regulatory actions to be possible in a widespread way in the care network. It helped with valuable information, for example: knowing the size and nature of accumulated demands, providing data on services and building protocols and implementing dynamics for certain calls. The tools offered by the regulatory complex, acting through invisible lines, supported territorial processes, with focus in the user and in the production of care.
Technological arrangements are tools that collaborate to healthcare and allow to see the regulation of access beyond the regulatory complex. Organizing complex health systems, such as SUS, contemplating integrality, equity and universality, requires the permanent construction of innovative strategies aimed at the population’s health needs. From the research point of view, the diversity of arrangements created at different points in the care network, with the participation of different actors, was understood as capable of producing efficient and quality healthcare.

References


Authors’ contribution
Freire and Feuerwerker were responsible for the elaboration of the project, data collection and analysis, writing and revision of the article. Louvion was responsible for the elaboration of the project, data collection and analysis, writing and revision of the article and guidance of all stages. Chioro was responsible for writing and revision of the article. Bertussi conducted data analysis, writing and revision of the article.

Received: 08/04/2019
Resubmitted: 03/19/2020
Approved: 03/30/2020