Implementation of public health policy and its challenges in the digital age

Vera Lúcia Peixoto Santos Mendes
Universidade Federal da Bahia / Escola de Administração, Núcleo de Pós-Graduação em Administração
Salvador / BA — Brazil

Fábio Campos Aguiar
Universidade Federal da Bahia / Escola de Administração, Núcleo de Pós-Graduação em Administração
Salvador / BA — Brazil

This article analyzes the implementation of public policy on regulation of beds in intensive care units, considering the formulated policy, the institutional conditions and the strategies used by the state and municipalities of Bahia, Brazil. A literature review is carried out, based on the rational choice institutionalism, as well as a qualitative study with three groups of street-level bureaucrats. Results show a gap between the policies formulated and implemented and the influence of bureaucrats in the implementation of public policies in health. In addition, the research observed the use of information and communication technology such as social media (WhatsApp) as regulation strategies. The informal control and assignment of beds using WhatsApp is a clientelistic strategy, indicating that, even under the aegis of the managerial state, clientelistic and patrimonial practices persist.

Keywords: health policy; implementation; managerial state; regulatory strategies; street-level bureaucrats.

Implementação da política de saúde pública e seus desafios na era digital

Analisa-se a implementação da política pública de regulação de leitos em Unidades de Terapia Intensiva, considerando-se a política formulada, as condições institucionais e as estratégias utilizadas pelo estado e municípios baianos. Realiza-se revisão bibliográfica à luz do neoinstitucionalismo da escola da escolha racional e estudo de natureza qualitativa com três grupos de burocratas de médio escalão. Os resultados evidenciam um gap entre a política formulada e a implementada, a influência dos burocratas na implementação da política pública e uso das tecnologias da informação e comunicação, utilização de semelhantes estratégias de regulação, sendo a estratégia clientelística, associada ao uso do WhatsApp, encontrada na regulação paralela de leitos, indicativo de que, mesmo sob a égide do estado gerencial, persistem as práticas clientelistas e patrimonialistas.

Palavras-chave: política de saúde; implementação; estado gerencial; estratégias de regulação; burocratas de médio escalão.

Implementación de la política de salud pública y sus desafíos en la era digital

Se analiza la implementación de la política pública en materia de regulación de plazas en las unidades de cuidados intensivos, teniendo en cuenta la política formulada, las condiciones institucionales y las estrategias utilizadas por el Estado y los municipios. Se llevó a cabo una revisión de la literatura a la luz del neoinstitucionalismo de la escuela de la elección racional, y estudio cualitativo con tres grupos de burócratas a nivel de calle. Los resultados revelan una brecha entre la política formulada y aplicada, la influencia de burócratas en la implementación de la política pública y el uso de tecnologías de la información y la comunicación, con uso de estrategias de regulación similares. La estrategia clientelista, que se asocia con el uso de WhatsApp, fue encontrada en la regulación paralela de las plazas, lo que indica que, incluso bajo los auspicios del estado gerencial, persisten las prácticas clientelistas y patrimoniales.

Palabras clave: políticas de salud; implementación; estado gerencial; estrategias de regulación; burócratas a nivel de calle.

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1. INTRODUCTION

In Brazil, the analysis of public policy implementation is an area of study still under construction, object of few academic reviews within the field of public administration and scantily debated in all spheres of government, being an interdisciplinary matter. While most of the academic debate happens over the limits of implementation, for instance, regarding the inclusion of performance evaluation in public policy, actually there is little discussion over implementation and governmental action. It is a process that rises in complexity proportionally to the magnitude of the social issues demanding a response from the public power (Faria, 2003; Fernandes, Castro and Maron, 2013).

The implementation of social policy presents few dilemmas: how to find an approach that considers intersectoral and regional aspects in order to build appropriate responses to the complex problems of contemporary societies; how to contemplate the social diversity of the target population, their sociocultural, regional and local specificities, specially when dealing with universal policies, such as public health policies, distinctively regarding the definition of its agenda.

Such dilemmas may be verified when analyzing the implementation of a policy for the regulation of beds in intensive care units. This happens because health is a universal right and a duty of the State (Brazil, 1988); the area involves the conflictive relationship between public and private and, consequently, profit versus non-profit healthcare.

In order to achieve effective results, policy implementation requires: legislation with clear and consistent purposes; embodiment of a solid theory; maximizing the probability of policy implementers and target groups acting as desired, specially street-level bureaucrats (SLB); working with a proper hierarchical integration; possessing enough financial resources; having access to support, solidary implementation agencies, with political and managerial skills and compromised with the purposes of the policy; having the support of organized groups and key legislators; and controlling environmental changes that may constrain the implementation (Lima and D’Ascenzi, 2013).

In the health sector, regulation is a function of the State, whether directly or through regulatory agencies. The focus of the present work is on State regulatory action and aspects of its implementation such as: universality, intersectoral aspects, hierarchy and decentralization of healthcare services; dependence on specialized workforce and the interaction between information and communication technology (ICT) and SLB.

According to Souza (2003:11), the literature on public policy has seldom been translated in Brazil and the empirical application is relatively scarce. Also, despite the regulation mark for public policies and studies on health regulation policy (Ribeiro, Costa and Silva, 2000; Castro, 2002; Lima, 2010; Santos, 2011; Gomes, 2013; Lima and D’Ascenzi, 2013), conceptual aspects are still discussed, such as the regulation between the public and the private spheres or between different spheres of government, or self-regulation, like with professions councils. Therefore, there is a theoretical and empirical gap in the perspective of the health policy implementation, specially regarding the regulation of high complexity technological services. International studies, such as Bussmann (1998) e Majone e Wildavsky (1984), present the experience of European countries on policy implementation and decentralization of healthcare services, but since they carry regulatory marks and institutional contexts very different from the Brazilian context, there is little empirical contribution.
The policy implementation process is influenced by its features, by the organization of the administrative apparatus responsible for the implementation and by the ideas, values and worldviews of the actors. Secchi (2015:101) categorizes the actors as: a) governmental, represented by bureaucrats, politicians and judges; b) non-governmental, comprised by lobby groups, political parties, the media, *think tanks* — organizations for research and consultancy in public policies —, recipients of public policies, third sector organizations and other *stakeholders*: suppliers, international agencies, epistemic communities, funders and specialists. Additionally, the process derives from the style chosen by the bureaucracy (Lipsky, 2010; Pires, 2009), and variables such as discretion and the adoption of the principle of efficiency present in the New Public Management (NPM) approach (Tummers and Bekkers, 2014; Knoepfel, Kissling-Näf and Bussmann, 1998).

Pinho (1998:77) questioned whether it would be possible to implement the NPM, creating a clean slate from patrimonialism, if this approach could coexist with patrimonialism and provide the effective answers given in the First World or if the implementation would contribute with the disappearing or weakening of patrimonialism. In this regard, despite the promises of efficiency, coming from the NPM and embodied by the managerial state, regarding the implementation of public policies, it is possible to notice that the State withdraws from this step, creating a gap between the managerial speech of efficiency and what actually takes place in Brazilian public administration, since the NPM did not replace public bureaucracy, they still open space to perpetuate old patrimonialism and clientelistic practices.

The implementation of public policy is a consequence of the interaction between intention and the elements of the local action context, and it is tied to several constraints. In the case of the implementation of the public policy for the regulation of beds in intensive care units, the local contexts may define who will have access or not, depending on the offer of services and on the formal and informal relationships that connect the institutions and the actors. Thereby, the following question presents itself: what are the strategies used by the state and municipalities of Bahia to implement the public policy on regulation and to address the accessibility difficulties faced by users of the beds in the intensive care units?

Granted that, this work seeks to analyze the implementation of public policy on regulation of beds in intensive care units, starting from the formulated policy, considering the institutional performance conditions and the strategies used by the public bodies to address the accessibility difficulties that face users of beds in intensive care units. For this purpose, a bibliographical review on implementation of public policy in the light of rational choice institutionalism was carried out, and the results of the regulation strategies used by the municipalities and the state of Bahia regarding accessibility difficulties to beds in intensive care units are discussed.

The work stems from the following premises: ICTs are strategic in the operation of the Brazilian unified health system (SUS), if used as enabling mechanisms for the services and the implementation of health policy (Brazil, 2004). The following assumptions are adopted: a) in health services, regulation is a duty of the State and it involves the execution of normative, administrative and managerial actions in the health system, through processes of macro and micro regulation (Brazil, 1998);

1 According to Bresser-Pereira (2001:28), the managerial state is a state of transition between elite policies and a modern democracy, in which the civil society and the public opinion are increasingly important, the defense of the democratic rights of each citizen is respected and the public assets are used for the public.
b) the implementation of public policy derives from the discretionary power and from the styles of implementation chosen by the bureaucracies, being also influenced by the regulatory marks, the use of ICT, the organization of the administrative apparatus in charge, its ideas and values (Knoepfel, Kissling-Näf and Bussmann, 1998; Pires, 2009; Tummers and Bekkers, 2014).

Beyond this introduction, the following sections present different branches for analyzing implementation of public policy, focusing on new institutionalism, methodological aspects and results.

2. IMPLEMENTATION OF PUBLIC POLICY: ANALYSIS APPROACHES

Neo-institutionalism has been a dominant branch in the studies of public policy. Hall and Taylor (2003) and Deubel (2007) consider it not to be a unified branch, with differences in schools of thoughts, namely historical institutionalism, rational choice institutionalism and sociological or cultural institutionalism.²

Scholars from the rational choice school apply behavioral premises, stating that the actors share a set of preferences and act in a utilitarian way in order to maximize their satisfaction; often using high strategies that imply a significant amount of calculations (Hall and Taylor, 2003). The dilemmas of the collective action lead the actors towards maximizing the satisfaction of their preferences, at the risk of producing a result less than optimal for the collectivity (Olson, 1965). For Hall and Taylor (2003:205-206): “[…] it is plausible for the behavior of an actor to be determined, not by impersonal forces, but by a strategic calculation, strongly influenced by the expectations of the actor regarding the presumed behavior of other actors”. Considering those aspects, rational choice institutionalism is a theoretical support for result analysis, despite the recognition of its limits, specially its functionalist and static aspects (Lima, Machado and Gerassi, 2011), as well as a focus on the genesis and not on institutional development, which is another fragility of cultural institutionalism (Peci, 2006).

Implementation is the “[…] phase of a public policy during which acts and effects are generated from a normative framework of intentions, texts and discourses” (Meny and Thoenig, 1992:159). The seminal work of Pressman and Wildavsky (1984) defines implementation as the execution, the fulfillment and the complete production of services. This definition encompasses the role of the SLB in rendering efficient and equitable service to the citizen. Both definitions are of interest for this work. The first one because it focuses on the importance of regulatory marks and the second one because it emphasizes the role of the SLB in the implementation of public policy, even though it does not approach the importance of the ICT.

The planning process and the technological process influence the implementation of policy, however, literature was delayed in recognizing its importance. (Bussmann, 1998; Oliveira, 2006:267). Implementation is considered one of the phases of the policy cycle and it is influenced by the following factors: unpredictability; multiplicity of actors and organizations, with diverse interests; change of actors, their interactions, perspectives and perceptions; discontinuity and the need for new negotiation (Lima and D’Ascenzi, 2013; Secchi, 2015). Additionally, there is the discretion of the SLB, the use of ICT and its purposes.

² According to Lima, Machado and Gerassi (2011), more recent branches of neo-institutionalism are recognized, and have been representing advancements in comparison with more traditional ones, such as the constructivist neo-institutionalism and the network neo-institutionalism, but those are not objects of this particular work.
Within the literature on policy implementation the classic approaches are: top-down or perspective drawing and bottom-up or descriptive drawing (Lipsky, 2010; Elmore, 1996). The first one presents public policy as a sequence of distinctive steps guided by different rationales, assuming that the formulation process would be pervaded by the rationale of the political activity and that implementation would be placed within the scope of administrative practices (Muller and Surel, 2002). Therefore, between formulation and implementation, different arenas and actors exist.

The latter emphasizes the discretion of the implementers, who detain knowledge over local situations and are able to adjust them to the plan (O’Brien and Li, 1999, apud Araújo, 2012; Tummers and Bekkers, 2014). The analyses are centered on organizational actors responsible for the implementation, considering that the policy changes as it is executed, and that implementation is a scattered and decentralized process. This approach assumes that, in complex systems, the ability to solve problems does not depend on hierarchical control, but on the maximization of the discretion. Thereby, implementation is an autonomous process, where crucial decisions are made and not only implemented. The implementing bureaucracy is a relevant explanatory variable and responsible for its success or failure.

For Matland (1995), the bottom-up model considers the micro-implementation and macro-implementation structures, which allows the central planner to indirectly interfere in the context of the micro-implementation. For the supporters of this model, the goals, the strategies, the contacts and the interaction between the actors should be understood, because it is in this level that the policy will happen and affect the lives of the people. The influence of SLB and the ICT at their disposal needs to be analyzed in order to prevent its effects on the citizens.

This model allows the visualization of the coalitions formed and the indirect effects of the implementation. Cavalcante, Camões and Knop (2015) present different approaches to SLB and assert that there are differences and similarities between those actors, between government sectors and between different areas in public policy. Lotta, Pires and Oliveira (2015:68) cite the work of Currie and Procter and emphasize the power of cohesive professional categories, such as physicians, which influences the actions of bureaucrats. Vaquero (2010:152) adverts that in policy implementation analysis, besides bureaucracy, it is necessary to observe the nature of the different types of policies and the effects they may cause, because in the information and knowledge society, not only SLB, but also ICT, the multiple actors and factors that interact and influence this process.

Whether using the top-down or the bottom-up model, the implementation plan developed depends on a set of parameters that describe the political context in the moment. Those situational parameters are the dimensions that the drawer of the policy execution does not control. They include the scope of the change, the validity of the technology, the conflicts within the institutional purpose, the configuration and stability of the environment (Berman, 1980 apud Matland, 1995).

According to Matland (1995), this form of political understanding is associated with the context and with the identification of factor that might interfere in the implementation. The author presents normative and methodological criticism against this model. Regarding the normative aspects, within the democratic and decentralized context, local authorities, whose power is not derived from the popular vote, control the policies, making its legitimacy questionable. The second criticism is of the methodological discussion, because, in order to analyze implementation, a perception of those involved in this phase is sought, granting the indirect effects hard to perceive. According to O’Toole (1986) and Araújo (2012), the polarized debate between the top-down and bottom-up approaches was replaced by the recognition of the strong points in each of them, with the need to seek theoretical diversity.
The implementation studies are not capable of answering every question, new research can take place using methodology from all approaches or synthesis approach (Marques, 2008; Cruz-Rubio, 2011).

From this perspective, Najam (1995) synthesizes the top-down and bottom-up approaches in a broader analysis model, which includes five variables (policy content, institutional context, commitment of the stakeholders, administrative capacity of the implementers and coalitions between stakeholders) that may strengthen or weaken the implementation.

According to O’Toole (1986), factors that may interfere with policy implementation are: financial resources and their management; behavior and motivation of the bureaucracy and the number of bureaucrats involved; institutional negotiation; standardization, clarity of goals and purposes; local conflicts; inter-organizational communication and structure; execution time and legal timeframe; and legislation that supports implementation. Furthermore, also are interfere with implementation: deficit in managerial capabilities inside the institutions responsible for the implementation of the policy and institutional context (Bueno, 2005). In the digital age, discretionary power and the use that SLB makes of the ICT would be inserted in the institutional context.

The discretionary power of the bureaucracy is considered a very influent factor in policy implementation, because it is not inert or neutral (Meny and Thoenig, 1992; Knoepfel, Kissling-Näf and Bussmann, 1998; Tummers and Bekkers, 2014). Therefore, it is recommendable, in every policy implementation process, that the political and administrative context of the bureaucracies be conceived (Araújo, 2012). However, in the scenario of the managerial state, there are the ideas of credibility and commissioning. The first one means the prevalence of pre-established rules more efficient than the discretionary power of politicians and bureaucrats. The second one regards the importance of the action of national and international “independent” agencies in the implementation of policy.

The efficiency of the policy implementation depends on the definition of roles, responsibilities, controls and coordination (Subirats, 1994), because they are not devised or executed by a single body of government (Knoepfel, Kissling-Näf and Bussmann, 1998). In Brazil, health policy is devised by the federal government and executed by the state and municipal spheres, and, despite Law 8.080/1990 presenting the competences of each governmental sphere, some are shared, which requires form the government incentives and the adoption of management strategies, control over coordination actions and operationalization (Brazil, 1990).

Consequently, it is possible to observe the lack of a single bias in the implementation of policy, with relevant aspects such as: professional capacity, the ICT and the control over information; networks and the formal and informal communication structures, inside and outside public administration; knowledge over who are the bureaucratic agents involved in the formulation and implementation of the policy; information/knowledge; human and financial resources; time, participation and coalitions in target-groups. Furthermore, the various aspects that interfere in the implementation process of a public policy can be analyzed within two contexts. In the first context, implementation is considered a stage of the formulation of the policy. In the second one, when studies analyze the implementation as a stage of the execution of the policy, which is the case in the present study.

According to Cepik, Canabarro and Possamai (2014), ICT has been used in search of efficiency in governmental processes as well as in the offer of opportunities for public participation and channels for the interaction between the State and civil society. There is an understanding that the ICT facilitates and broadens the transactions, the flows and the existing connections within the actors network that have a relationship with the public sphere. It is possible, then, to talk about governance in the digital age, which intends to legitimize the managerial state, overcoming insufficiencies of
the bureaucratic public administration. ICTs are, here, understood in a broad perspective, beyond the WhatsApp mobile app, considering, in the empirical study, the official information services such as: Surem/WEB, Sisreg, formal communications, flows and protocols.

3. METHODOLOGICAL ASPECTS

A case study was conducted, of exploitative and qualitative nature (Yin, 2001) in 19 cities of the state of Bahia inside the East macro-region. Interviews were conducted with 55 subjects, comprising 20 public administrators (state secretary; state advisor and superintendent for regulation; municipal health secretaries); 27 directors and hospital technicians (intensive care coordinators and hospital regulation technicians) physicians and regulation technicians (eight subjects), four of them from the state regulatory agency (CER).

The primary data were gathered through the application of three types of questionnaires. The secondary data were collected through documental research: regulation policy (Brazil, 2008), flows, protocols, and norms. A content analysis was held (Bardin, 2011), with the support of the NVivo software. In order to analyze the implementation of the policy for regulation of beds in intensive care the following categories are considered: regulatory marks, political-administrative context for implementation and strategies, over which improvements are proposed. For strategy analysis, the following sub-categories were used, adapted from Cecílio and partners (2014): bureaucratic or professional governmental, negotiated governmental, clientelistic and lay.

This research follows the guidelines and research regulation norms involving human being in healthcare, in accordance with Resolution 466/2012 of the National Health Council (Brazil, 2012). Therefore, the collection of data was authorized by statement of the research ethics council under research number 666.477/2014.

4. PRESENTATION AND ANALYSIS OF THE RESULTS

4.1 RESPONDENT AND HOSPITAL SERVICES PROFILE.

The profile of the respondents is described in chart 1.

<table>
<thead>
<tr>
<th>Category: Public Management</th>
<th>Category: Hospital Directors</th>
<th>Category: Regulatory Technician</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurses (28,6%)</td>
<td>Physicians (48,1%)</td>
<td>Physician (25%)</td>
</tr>
<tr>
<td>Physicians (19,0%)</td>
<td>Nurses (37%)</td>
<td>Technicians (75%), Nurses (62,5%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age composition</th>
<th>Between 41 e 52 years old (52,4%)</th>
<th>Between 41 e 52 years old (52,4%)</th>
<th>Between 30 e 39 years old (50%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management specialization</td>
<td>Yes (54%) No (46%)</td>
<td>Yes (59,3%) No (40,7%)</td>
<td>Yes (75%) No (25%)</td>
</tr>
<tr>
<td>Time since graduation</td>
<td>Between 10 and 20 years after graduation (42,9%)</td>
<td>More than 10 years after graduation (77,7%)</td>
<td>Between 5 and 10 years (50%) Time working on regulation: 5 to 10 years (62,5%)</td>
</tr>
</tbody>
</table>

Source: Field research (2016).
The staff is predominantly formed by professionals graduated up to 10 years ago, with experience in the field of regulation between five and 10 years, showing compatibility between the time elapsed since graduation and the exerted functions (chart 1).

Regarding the services offered, there are hospitals in 58% of the cities researched, and, among those, 31.6% of the cities have beds for intensive care treatment. 21.1% of the cities have hospitals without intensive care units and 47.4% of the cities do not have hospitals.

4.2 ANALYSIS OF THE IMPLEMENTATION OF REGULATION POLICY: REGULATORY MARKS AND POLITICAL-ADMINISTRATIVE CONTEXT

The 1988 Brazilian Federal Constitution established the characteristics of the unified health system (SUS) and the need to standardize and organize health services. Such actions require macro-regulatory processes, and it is the competence of the public power to dispose over its regulation, monitoring and controlling actions and health services, under direct management or outsourcing. The micro-regulatory processes define which actions and public services integrate the regionalized and hierarchical network that constitutes the SUS, which follows such principles: decentralization, with a single administration in each sphere of government; universal care, prioritizing preventive activities, notwithstanding assistance services and taking part in the community (Brazil, 1988, art. 198).

Law 8.080/1990 institutes the macro and micro-regulatory processes establishing the public and private services and actions that integrate the SUS, and it has as one of its purposes the formulation of healthcare policy, in the social and economic spheres, seeking to promote the right to healthcare, ensuring “integral assistance” (Brazil, 1990).

In the SUS, assistance regulation is the official strategy of the implementation of the health policy for regulation of beds and it emerged from the Pact for Health and from the creation of regulatory complexes (Brazil, 2006). The regulatory complexes are part of the array of regulatory strategies for assistance, formed by a functional structure that integrates the Pre-hospital Care and Urgency Centrals, Hospitalization Centrals, Medical Appointments and Exams, Assistance Protocols, hiring of personnel, assistance control, regionalization, programming and evaluation. They may comprehend the municipal level, micro our macro-regional, state or national, under a pact between the management spheres of the SUS (Brazil, 2008). The National Policy for Regulation of the SUS was instituted by the Health Ministry via Implementing Decree 1.599/2008, as an attribution of all spheres of management, with the purpose of regimenting actions of regulation, control and evaluation in the extent of the SUS and strengthening the regionalization process of healthcare, through the organization of networks and assistance flows, providing equitable access and the integration of the healthcare actions and services (Brazil, 2008).

The regulatory process is organized as a set of actions developed by the regulatory complexes, which translate into flows, assistance protocols, centrals for beds, appointments and exams and workflows corresponding with the action of the professionals involved. According to rational choice institutionalism, such process involves agents and a principal agent. In this study, the principal agent is represented by the state and corresponds to the state and municipal health administrators, regulatory physicians, hospital directors and technicians. The agents are represented by the health services provided, public (hospitals managed by social organizations) and private (public-private partnership), users and families.

The scenario in which the implementation of the policy for assistance regulation in the SUS takes place is marked by complexity, interconnecting the management and the healthcare dimensions, pervaded
by conflicts involving the state and municipalities, the healthcare services, the workers, the users and the families, assembling a contradictory system and moving through tensions (Gawryszewski et al., 2012). The representatives of the principal, here named “street level bureaucrats”, according to Implementing Decree 1.555/2008 (Brazil, 2008), are responsible for the regulatory function, and are subject to having purposes and interests different from those establish by the implementation policy, as well as the agents, represented by the providers, who also may have personal interests and mechanisms for regulation.

The result of the interaction between agent and principal might cause the implementation of the policy for the regulation of beds to happen differently from how it was formulated. The formulated regulation is implemented in spaces with conflictive social relationships, built upon articulations and negotiations of diverse interests. This context has been causing the concept, the practices and the purposes of the assistance regulation to be questioned by users and families, which hold it responsible for the difficulties in the services of the SUS network, paradoxically to its purpose; from the regulation professionals that have their sanitary authority questioned, and from the technicians, who are not able to follow formal protocol and flow.

The state and the municipalities have autonomy to organize their own regulation complexes. The State Central Regulation (CER) is the operational unit of the Assistance Regulation of the state of Bahia, which acts in consonance with governmental goals, under the hierarchical control of the State of Bahia Health Secretariat (Sesab). The political-administrative context of the state enabled the establishment of a complementary relationship, in the management of the dispositions of the access regulation, between Sesab and the Salvador Municipal Health Secretariat (SMS/SSA).

In order to implement the state regulation policy, the Sesab developed protocols for access regulation, flowchart and forms for regulation request, defining the qualified assistance network. Regardless of the origin of the patient, the request of a bed in intensive care units must be made by the regulatory complex. In practice, the policy implementation policy faces access barriers and makes use of the strategies described hereinafter.

4.3 Regulation Strategies Used by the State and the Municipalities in Dealing with the Difficulties in Access to Beds in Intensive Care Units

Strategies are defined as the form of execution of a policy (Matus, 1993), which, in the case of this study, is the regulation of the implementation of policy for the regulation of beds in intensive care units, according to the perspectives of the healthcare administrators, hospital directors and regulation technicians. The subcategories of the regulation strategy analysis were adapted by Cecílio and partners (2014) and presented in the methodology.

4.3.1 Strategies in the Perspective of the Public Administrators

Bureaucratic governmental:

Diagnosis with the amount of users, well-developed physician reports and constant patient data update by the State Central Regulation (CER). Wait for return from the CER. Begin evaluation

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3 According to Travassos e Martins (2004:197), access is a dimension of the performance of the health system associated with the offer. It is understood that healthcare is not only defined by the use of health services but, when dealing with the need for intensive care treatment, access can be defining of the chance of survival.
and monitoring (regulator and municipal administrator municipality/SSA, municipal secretary L). Construction of more units, hiring of beds from the private and philanthropic sector and definition of the role of the units. [state administrators 1 and 2]

Negotiated governmental:

Keeping a permanent communication with the hospital or reference. Persisted on notifications to the CER. Used the Service for Medical Emergencies (Samu). Articulated with colleagues in the hospitals and acted together with the CER for information and negotiation. We have an easy communication because we understand the way of thinking of the regulation. We used the Samu regulation. [municipal secretaries C/H/M/O]

There are many regulations within the regulation, you can find the bed and not have an ambulance to transport the patient, and then you can lose your place. It has happened; because beds in intensive care are never idle […]. [municipal secretary P]

Clientelistic:

There is a search for contacts that help with the regulation; we contact people close to the service and acquaintances at the hospitals. Direct contact with the management of the hospital from the XXZ city. We make political requests to Congressmen, using the friendships we have and we have a WhatsApp group. [municipal secretaries B/D/E/F/H/I/J/N]

Lay:

Pray for patience. As a last resource, the family is advised to go to the Public Prosecutor’s Office. The family is oriented to find another city or some contact. The family is advised to go to the media. [municipal secretaries A/G/P]

In the bureaucratic governmental strategy, stand out the need for evaluation and monitoring, the lack of beds, the recognition of a lack of control, revealing the power of the SLB. The use of negotiated governmental strategy corresponds to the resolution of the problem with access through the improvement of the communication between the CER and the hospitals. Public administrators also use the clientelistic strategy, using WhatsApp, making “political requests to representatives” and subjecting themselves to the consequences of those practices; and the lay, advising the family to look for the Public Prosecutor’s Office and the media.

4.3.2 STRATEGIES UNDER THE PERSPECTIVE OF THE HOSPITAL DIRECTORS AND TECHNICIANS

Professional or bureaucratic governmental:

Only uses the CER. Search for the optimal use of the beds available through the management of beds, or adaptation of other beds available in the unit. Management of beds. Seeking opti-
mization of internal beds with control from the planning until the estimate hospital discharge and availability of the bed. It is necessary to have transparency […], and the conscience that it is a SUS bed, honesty when informing where the available beds are […]. It is necessary to have the conscience that there is a process and that lives of people depend on it. [Hospital director, SSA1 hospital; municipal technician F; hospital technician SSA2; maternity ward physician, B municipality]

Negotiated governmental:

The logistic created by the hospital by transforming regular beds into semi-intensive ones. Articulates the transference, permanence, and greater agility in the intensive care and on the availability of the beds. Admitting patients in other units until a new bed opens in the intensive care. Care line to the clinical patient with multi-professional logistics that discusses and defines the best strategy. Proposed the renewal and expansion of the physical space. Hiring more professionals. We tried communicating with the regulation in order to minimize interference but the structure is suboptimal. It is hard to contact the CER. The human and technological resources are scarce […]. The proposal from the CER is an innovation. What should be very good, but is actually very different. There is no return […]. The Nurse in charge bed management operates to evaluate the usage of the beds and internal regulation. [hospital director, F municipality; hospital technician, D municipality].

Clientelistic:

You seek the support of a family member to enable the alternative access, through some politician. Seeking beds extra-officially (acquaintances in other cities). Calling the mayor. Public administrators (mayors) seeking professional in the State Health Secretariat with higher qualification. Through acquaintances and friendships. [Hospital directors G/F/O municipalities, technician O municipality]

Cheating the regulation system. ZAP (WhatsApp) is the best regulation strategy. [Hospital technician D municipality]

It is possible to observe that, under the perspectives of hospital directors and technicians, despite the predominance of the bureaucratic governmental and negotiated governmental strategies, the clientelistic strategy is present, moreover, using WhatsApp. The family is oriented to act in a clientelistic way, looking for someone who works on the hospital or a politician. This, besides cheating on the formulated policy, denies healthcare as a duty of the State and a right of the citizen.

4.3.3 PERSPECTIVES OF REGULATION PHYSICIANS AND REGULATION TECHNICIANS

Professional or bureaucratic governmental:

Informing the CER about the urgency and the daily necessities. Collecting as much information about the patient as possible in order to avoid refusals (which happen very often). Reform and
expand the physical space, acquisition of human resources. [regulation technician, I municipality; regulation technician, SSA1 hospital; Coordination of Regulation, CER]

Negotiated governmental:

Seeking ways to improve the communication. Communicating the CER about the need for backup beds in order to make new admissions viable. Asking for daily *e-mails* about the existing openings and notification from those hospitals. Orienting and developing continued education with the units, improving communication and refining the screening process. [Regulation technician, CER; regulation physician, CER; Coordination of Regulation, CER]

Clientelistic:

Calling colleagues insisting and interfering with the coordination. Using personal context to avoid barriers in communication. Appealing to congressmen. Using acquaintances with a physician that works in intensive care, because it is always possible to find beds through friendships. [Regulation technician, B municipality; regulation technician, SSA2 hospital]

Some times it can take days to find a bed, but the patient has to come from midland and the city has no ambulances […] and it is not possible to dislocate a unit from Samu […] so the municipal secretary asks a neighboring city, or a congressmen […] very often they are taken to another unit […]. And all of this weakens the continuity of our work. [CER technician; emphasis added]

Lay:

Asking family members to rent a mobile intensive care unit. [Regulation technician, B municipality]

It is possible to observe that regulation physicians highlight the need for communication with the CER, but also refer to the clientelistic strategy for policy implementation. Even though those professionals do not have direct contact with users and family members, because their limit is the scope of the CER, they know the influence that the relationship with the doctor that works in intensive care has and recognize that it weakens the work of the CER. The lay strategy, orienting family members to rent a mobile intensive care unit, besides violating the principles of the SUS (equity, universal access), does not resolve the situation because, as is the case with transferences through the Urgency Medical Service system (Samu), this user will remain in line for intensive care unit beds.

The use of clientelistic and lay strategies, incorporating WhatsApp, was found in the three groups researched. This reveals that the implementation of regulatory policy does not occur as formulates, once it does not work as a management mechanism created to equate the difference between supply and demand in healthcare services and, furthermore, values, interests and discretionary power of the SLB, associated with the use of WhatsApp, interfere in the implementation of policy, associated with the lack of coalition between the groups of users.
According to the norms of assistance regulation, the regulation physician has the prerogative of the sanitary authority with technical power to appoint which patient will be directed to an intensive care unit according to the priority of his or her healthcare need. However, this subject (principal), which should have the power of deciding according to technical criteria, appeals to other actors to make viable the access to beds that should be at the disposal of the healthcare network, making questionable the efficiency of the implementation of policy for regulating beds in intensive care units and to what extent it reaches its purposes.

4.3.4 STRATEGY FOR FASTER TRANSFERENCE OF A PATIENT TO THE ICU, ACCORDING TO DIRECTORS, PHYSICIANS AND HOSPITAL TECHNICIANS

Professional or bureaucratic governmental:

Empowering the CER and valuing the technical argument against others. Contacting the regulation physician. Defining the profile of the hospital. Requesting the insertion of the evaluation in the first medical care. Supervising the beds. Improving the management of the beds and working with quality metrics. [director, SSA1 hospital]

Negotiated governmental:

Using Samu. Bringing the needs to superior management in order to broaden the offer of beds. [Maternity ward physician, B municipality]

Clientelistic:

A good conversation with someone from regulation is more effective than a FAX; WhatsApp is the best regulation tool. Finding a bed extra-officially (acquaintances in other cities). In the CER it is necessary to contact the colleagues by telephone and even the Regulation Superintendency. Calling administrators from other units. Calling people or professionals one knows inside reference hospitals. Calling the mayor. The human factor is a hindrance. (Hospital technician, O municipality). Sending the patient through ambulance for speed and to maintain transportation availability. [Hospital technician, D municipality]

When referring to the fastest strategy for transferring a patient to ICU, it is possible to note that, under the perspective of hospital directors and technicians, the clientelistic strategy is predominant, emphasising the use of the WhatsApp app. This scenario configures a parallel regulation, through the use of ICT and causes biases in access priority by technical criteria, nominating the medical care according to the interests of the SLB. There is also the understanding that this strategy brings consequences:

I know it is very common, but I have never used WhatsApp. Firstly, because it breaks medical ethics […], than, because, if someone cannot find a bed, it is possible the family will go to court. Those who do not know how the system works often times will sue the hospital, which is a hassle because, when the injunction comes, the judge’s sentence always reads “be it enacted”[…] and you have to crate a vacancy. [UCI coordinator, hospital 7]
This speech refers to a hospital agent hired by the Sesab who declares not to practice parallel regulation and to be aware of its consequences.

In the state of Bahia, the policy for regulation of beds in ICU has been implemented through the adoption of professional governmental strategies, negotiated and clientelistic strategies and lay, characterizing what Castor (2004) calls the specific “Jeitinho” of the authoritarian bureaucratic state, which has been finding resonance in the managerial state, where the SLB uses WhatsApp to bring speed into the system, through clientelistic practices, even though human lives are at stake. This reveals that, even in the digital age, patrimonialism renews itself in order not to change.

According to the parameters for assistance coverage in Implementation Decree GM/MS 1.10/2012, the necessary number of ICU beds is between 4% to 10% of the total or 2.5 to 3 beds by 1.000 inhabitants (Brazil, 2012). In the state of Bahia, with estimated population of 15 million inhabitants (Brazil, 2010), the SUS has available 815 ICU beds (CNES, 2013), meaning, therefore, a deficit greater than 70%. In the Eastern macro-region, the deficit is 39%, being responsible for around 65% of the production of ICU daily occupancy. Granted that, administrators, hospital directors and technicians, regulation doctors and technicians recognize that the number of ICU beds is not sufficient to meet the needs of the population in the Eastern macro-region, with the use of the ICT, in this case, the WhatsApp app, cited and recognized by public administrators, directors and technicians as the fastest strategy when transferring a patient to intensive care treatment.

5. FINAL CONSIDERATIONS

The analysis of the implementations of the policy for regulation of ICU beds in the state of Bahia reveals that there are discrepancies between formulation and implementation. Beyond the governmental strategies, the principals make use of clientelistic and lay strategies, using WhatsApp, social networks, political requests, or orienting families to resort to the Public Prosecutor, to the Judiciary and to the media in order to ensure access to a service, which should be a duty of the State to provide, through the action of the Executive Power, what may impact healthcare policies in a negative way.

In consonance with the literature, this is a study of the regulation of a welfare policy whose implementation has been happening for over 10 years, formulated under the aegis of the managerial state, in the political-administrative context of the decentralization of health policies. The implementing agency is the state and municipal direct public administration, through the action of the SLB, with as top-down formulation, but a mainly bottom-up implementation, in which bureaucrats use the WhatsApp app, with the excuse of speeding the access to beds in the ICU creating, themselves, informal mechanisms and a parallel regulation of beds, weakening the strategies and the formal ICTs (Surem/WEB, Sisreg, protocols and flows) and stimulating a lay regulation strategy.

Despite the regulatory marks for regulation of welfare policy being defined and having norms, goals, purposes, protocols and flows, in the analysis of its implementation, the interference of the factors from the referred literature is found, such as deficits in administrative capacity and institutional structure, evidenced by the lack of control and of metrics in the evaluation of its implementation; behavior of the SLB; institutional negotiation with prevalence of individual interests, instead of technical criteria based on the needs of the users; motivation of those involved (principal and agents); local conflicts and communication problems with the State Central Regulation (CER). Those deficits are fed by the incentive of the agents.
The findings of the empirical study reinforce the postulates of this research: a) in healthcare services, regulation is a function of the State and involves the execution of normative, administrative and managerial activities of the healthcare system, through processes of micro and macro-regulation; b) the implementation of policy stems from the styles of implementation used by the bureaucracies, being influenced by regulatory marks, the use of ICT, organization of the implementers, discretionary power, ideas and values (Knoepfel, Kissling-Näf and Bussmann, 1998; Pires, 2009; Tummers and Bekkers, 2014).

In 10 years of implementation of policy for the regulation of beds, the lesson is that, even under the aegis of the managerial state, the dysfunctions of the bureaucracy have been reaching welfare regulation, compromising the effectiveness of the principles of equity, accessibility and universality of the Brazilian Unified Healthcare System (SUS).

As contributions, the present study emphasizes, initially, the importance of separating policy evaluation from policy analysis, suggesting the need to increase political acceptance towards policy analysis, contributing to its institutionalization and legitimacy, as is the case in European countries, as well as the learning of policy analysis. Subsequently, it presents a critical analysis of the policy implementation process, focused on the use of the ICT by the SLB, highlighting the importance of implementation control, in a context of attempting to rationalize State activity, in the molds of the managerial state, which emphasizes results, efficiency and the use of ICT.

As limiting factors of the research, there is the fact that it is restricted to healthcare policy in the Northeast region. Therefore, the development of research involving other policies and other states of the union is recommended, preferentially those which historically are not so attached to clientelistic and patrimonial practices. Another recognized possible limit is the use of the rational choice school referential and its static focus over institutions, agents and principal, leaving space for new studies under the light of the constructivist networks neo-institutionalism.

The adoption of the following measures is suggested: a) increasing the number of ICU beds in the Eastern Macro-region, reaching the standards set by the Heath Ministry; b) institutionally strengthening the CER and the sanitary authority of the regulation; c) implementing regional complexes of regulation; d) using the strategy of professional or bureaucratic governmental regulation, adopting mechanisms of control and transparency regarding the use of ICU beds in institutions inside the system or outsourced; e) adopting the Health 2.0 perspective, embedding into the administration smartphone applications, enabling the CER to regulate the beds through this channel; f) creating the evaluation commission, with a staff of supervisors trained to evaluate the following of institutional criteria in ICU admissions; g) improving the quality of the information of the medical reports, the communication and the response time between the CER and the hospitals; h) stimulating the establishment of coalitions between the interested agents.

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4 The concept of the Health 2.0 assumes that welfare professionals must observe the cost-benefit ratio of the ICT in improving safety, efficiency and quality of healthcare, once ICT enable the exchange of information in real time and the constant interaction between physician, administrator and user. (Van De Belt et al., 2010).
REFERENCES


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Vera Lúcia Peixoto Santos Mendes
PhD in Administration and associate professor of the Administration Department of UFBA. E-mail: verapeixoto09@gmail.com.

Fábio Campos Aguiar
Doctorate student and MSc. in Administration from the Postgraduate Center of Administration of UFBA. E-mail: fabioaguiar.mkt@gmail.com.