DOI: 10.1590/1413-81232017223.33532016




# The role of Primary Healthcare in the coordination of Health Care Networks in Rio de Janeiro, Brazil, and Lisbon region, Portugal

Luís Velez Lapão [1]
Ricardo Alexandre Arcêncio [2]
Marcela Paschoal Popolin [2]
Ludmila Barbosa Bandeira Rodrigues [3]

**Abstract** *Considering the trajectory of Rio de Janeiro e Lisboa region regarding strengths of the their health local systems to achieve health for all and equity, the study aimed to compare the organization of the Primary Healthcare from both regions, searching to identify the advancement which in terms of the Delivery Health Networks' coordination. It is a case study with qualitative approach and assessment dimensions. It was used material available online such as scientific manuscripts and gray literature. The results showed the different grades regarding Delivery Health Networks. Lisboa region present more advancement, because of its historic issues, it has implemented Primary Healthcare expanded and nowadays it achieved enough maturity related to coordination of its health local system and Rio de Janeiro suffers still influence from historic past regarding Primary Healthcare selective. The both regions has done strong bids in terms of electronic health records and telemedicine. After of the study, it is clearer the historic, cultural and politics and legal issue that determined the differences of the Primary Healthcare coordinator of the Delivery Health Network in Rio de Janeiro and Lisboa region.*

**Key words** *Primary Healthcare, Healthcare Networks, Case study, Care coordination*

[1] Global Health and Tropical Medicine, Instituto de Higiene e Medicina Tropical, Universidade Nova de Lisboa. R. da Junqueira 100. 1349-008 Lisboa Portugal. luis.lapao@ihmt.unl.pt
[2] Escola de Enfermagem de Ribeirão Preto, Universidade de São Paulo. Ribeirão Preto SP Brasil.
[3] Universidade Federal do Mato Grosso. Sinop MT Brasil.

## Introduction

As stated by the World Health Organization (WHO), the Primary Health Care (PHC) established after the Alma-Ata Conference in 1978[1] is "now more than ever"[2] the appropriate strategy to improve access to care mitigating high costs and boost quality expectations.

There was little discussion on the need for reorganization of health systems in view of the age profile of the population. It is expected that by 2025 there will be 1.2 billion people over the age of 60, with the oldest (older than 80 years old or more) almost doubling today's numbers. It is known that in view of this situation, there will be higher costs and more use of health services[2].

Therefore, new forms organization of healthcare services have been envisaged, which can essentially support the management and control of chronic conditions, which are intrinsically related to aging, focusing on health promotion, habits or lifestyle of healthy lives through PHC. The idea is a PHC that is not restricted to a service level focused on groups in a situation of poverty but able to assume the coordination of all its users and the integration of its system[3].

The typology of PHC services show significant variations in the world and present defining characteristics as the Main Gateway to health services; Continuity of Care, especially for chronic conditions; Completeness, Coordination, Centrality of the family process; and Guidance towards community care, and assuming the responsibility for solving users' health problems[3]. Hence, the Health Care Network (HCN) projects are aimed at overcoming the fragmentation of care and the management of health services, and improving the political-institutional functioning of universal coverage systems throughout the world.

Through this technological model of production of health actions and services, it is expected a more active participation of managers, bringing them closer to health professionals, users and the realities of the community, instituting a culture of sharing, mutual aid and reciprocity[3].

In order to achieve their goals, managers and health professionals should have competencies aligned with the healthcare mission, with broad access to information, to financial support and availability of human resources, as well as organizational mechanisms and of healthcare delivery[4,5]. Another requirement is that the institutional environment allows the definition of core and field of competence, with a clear definition of the responsibilities that govern the division of labor among the different professional categories involved in PHC[6].

The complexity of HCN should be studied considering a theoretical framework or assumptions that support their organization. For this study, HCN are assumed to be poly-hierarchical sets of healthcare services, linked to each other by a single organizational mission, common objectives and cooperative and interdependent action, that allow to offer a continuous and integral attention to a determined population, coordinated By PHC[7].

The operational structure of the HCN is composed of four components: governance model, which aligns the PHC activities with the other attention points; Support Systems such as diagnostic and therapeutic support systems, pharmaceutical care and health information systems; Logistic Systems, which consist of user's identification card, electronic health records, regulated access systems to healthcare and transport systems; and a Communication Center that coordinates in-flows and out-flows of the care system, ideally located at the level of PHC teams[7]. Thus, once the systems presenting these characteristics, there is great potential to converge towards HCN under the aegis of PHC.

Considering the number of studies published on the subject and the importance of proving a new organizational logic of health services that are sensitive to chronic conditions and aging populations, a comparative analysis of the PHC organization was proposed in Rio de Janeiro (RJ) and in the Lisbon Region, seeking to identify the advances of these organizations in terms of coordination of HCN and in the management of chronic conditions.

When thinking about the structure of an HCN coordinated by a PHC entity, it is assumed that it is a complex process, with forces established in the intra and inter-services of healthcare. The resulting vector may approach or detach itself from the HCN scheme. To understand these aspects, it was necessary to define a theoretical framework of the study, which is presented in the next section.

### Theoretical Framework

The management of health organizations aims at contributing to a more efficient and effective health production process in priority areas with quality standards, opening the possibility for "smart" rearrangements that are estab-

lished to face or overcome the diversities and social complexities that arise in healthcare services.

The healthcare organization must be understood as a living system, which by its inner complexity is capable of generating strategies to deal with the paradox, diversities and uncertainties risen between health professionals and managers. Organizations are indeed open systems that allow the entry of "energy" (effort, ideas, motivations, interests, macro and micro-structures policies) that feed the "agents" (health professionals) so that they can counteract entropy and promote diversity, to generate new ideas that can help improve health processes[8].

The application of complexity theory interprets healthcare facilities as a "complex adaptive system" (CAS). They are complex because they are related to the interaction network of several agents and are adaptive since they are able to quickly adapt to the new conditions that are imposed by their environment[9].

In healthcare, the existing culture in each PHC unit arises from the "making sense" resulting from the multiple interactions between heterogeneous actors (in conversations, communications, and clinical visits). Team meetings are important components of collective learning, because it emerges from the analysis of the attempts and the error itself in the many actions.

The ability to communicate among the members of a team is fundamental to its good functioning, which results in an improvement in the quality of healthcare services, i.e. in the capacity to adapt. The formative process of a clinician is to learn and contextualize knowledge with those who know through action, which gradually leads to further improvement.

In order for a "self-organization" to emerge in healthcare, certain conditions are necessary, such as the focus on quality, the diversity of competences, the existence of qualified professionals, who know how to work with the most varied uncertainties, adversities and challenges. A "self-organized" PHC, resulting from positive interaction among healthcare professionals, can easily find patterns of behavior for its users. Given the complexity of their needs, these units will be in a better position to provide responses in line with identified needs.

The operation in "self-organization" allows to increase the portfolio of solutions available after the diagnosed situation for the quality of the healthcare service, promoting more cost-effective production of actions and closer to the users' needs. Figure 1 elucidates, in a didactic way, the strategic variables in the "Self-Organization" of a PHC to coordinate the HCN, which are essential for a satisfactory performance of a health system under the auspices of PHC.

## Methods

This is a case study[10] based on a qualitative approach and with evaluative dimensions. It is a method that has an increasing acceptance in the field of public and collective health, because it allows to define hypotheses, to deepen in relation to the object under analysis, to build a theoretical referential, to take into theoretical reflections, and to scan for new research horizons.

For the study, published material on PHC in the two regions was used, being considered scientific articles and gray documents as reports, official documents, journalistic, among other sources of information available online selected for the convenience of the authors. For the analysis of the empirical material, the HCN[11] referential was used.

## Results

Table 1 shows the main observed characteristics of the scenarios selected for the case study. Since they present very unique characteristics in terms of the organization of their services, it was decided to create central categories that allowed their comparability, as the historical from Alma Ata, macro and micro politics for the implementation and sustainability of PHC; Elements of an HCN and innovative mechanisms for strengthening PHC/HCN.

The first aspect observed was the PHC typology, adopted after the Primary Healthcare Conference in Alma Ata, considered the first international declaration that awoke and emphasized the importance of PHC as the key to universal access. This universal access was adopted in Brazil as selective PHC and in the Lisbon Region as a comprehensive PHC. With regard to the demographic context, it can be observed that both regions have been presenting, over the years, an increase in the number of elderly people and a considerable evolution of life expectancy.

It was also observed differences in terms of macropolitics, such as the promulgation of the Constitution conceiving Health as a Constitutional Law, having occurred in Portugal in 1974 and in Brazil only 14 years later. With regard to

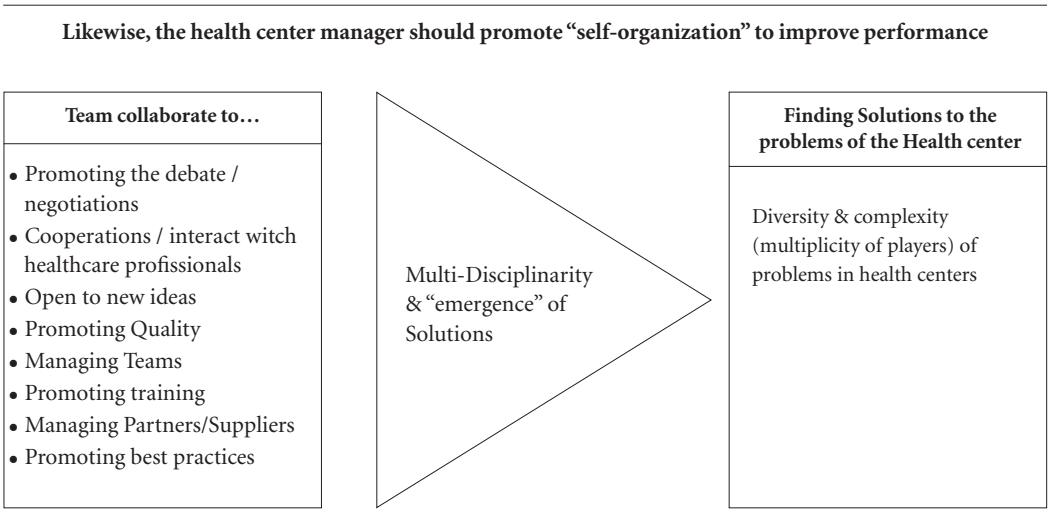


**Figure 1.**Ways for the development of Self-organization and to promote HCN coordenated by PHC.

Source: Adapted from Lapão[8].

the introduction of PHC, Portugal did it in mid-1985 and in Brazil in 1988 with the Constitution itself, later with Organic Law 8080 and 8142, with the Basic Operational Norms (NOBs) and, later in 2006, with The Health Pact. In terms of micro-politics, or local strategy for the strengthening of PHC, in the case of RJ, the "Present Health" Program was observed, which aims at the prevention and follow-up of patients, and in the Lisbon Region, no similar experience was identified.

Still in this context, it can be seen that in Rio Region until 2010, coverage of the Family Health Strategy (ESF) was less than 10%, compared to 2005 in Lisbon, which under a favorable political and economic context promoted by a majority government (the former had been mainly coalition governments) the reform of PHC was proposed through the restructuring and progressive autonomy of health centers with emphasis on the creation of small Family Health Units (USF), in which The primary healthcare was reconfigured into a new organizational and functional matrix, impacting on a later increasing coverage.

In RJ, in a chaotic health organizational context, specifically related with the epidemic of dengue and under social pressure, a project of expansion of the PHC was initiated in 2009. This project included the implementation of a new model of governance and support to favor an improve guidance of the work processes, to increase the resolution and impact on the health situation of individuals and communities, providing an important cost-effectiveness contribution, which enabled to reach approximately 50% of ESF coverage by 2015[12].

It is also worth mentioning that in the Lisbon region, for the implementation of PHC, the partnership with private healthcare services was used through complementary or substitution of healthcare schemes, in order to endorse private providers to develop incentive models for higher efficiency and equity, when viewed as substitutes for the provision of the National Health Service.

In RJ, the management model used for the expansion of PHC was the partnership with the Social Health Organizations (OSS), in which a new policy was assumed by health policy makers and managers, allocating PHC as the main Organization in the HCN[11,13]. There was also a significant investment in PHC, such as the implementation of the ESF in pre-existing basic health units, the inauguration of new health units (more attention points in HCN), called 'family clinics' and organized into ten program areas (AP)[14].

Another relevant aspect in these cases was the consolidation of information systems infrastructures, in which PHC is one of the sources of data and information generation. This information

**Table 1.** Comparative analysis of Health Primary Care capacity in the coordination of Networks in Lisbon and Rio de Janeiro, 2016.

| Dimension related to the conformation of Health Care Networks | | Lisboa Region | Rio de Janeiro |
|---|---|---|---|
| Background from Alma Ata | PHC tipologyinitiallyadopted* | Embracing | Selective |
| Demographiccontext | Elderly proportion in the population | 19,2% (2012) | 10,8% (2012) |
| | Life expectancy | 80,6 years (2002) | 75,2 years (2010) |
| Macro and micropolitics for APS implementation | Universal access | yes | yes |
| | Constitution promulgation year that defines health as a constitutional right | 1976 | 1988 |
| | Introduction year of Primary Health Care Policy as structuring axis of the System | 1985 (Family Physician Career Creation) | 1988 (Reinforced by the Health Pact) |
| | PHC policy as coordinator of a Care Network | yes | yes |
| | PHC /Family Health Strategy Coverage between 2010 and 2015 (tendency) | 10 to 60% | 9,52 to 46,16% |
| | PHCMicropolitics | -- | Current Health |
| | Ambience for PHCinstallation | yes PHC with health teams organized voluntarily (with physicians, nurses and technicians) | yes Health professional fixing difficulties such as nurses, technicians and, in particular, physicians |
| | Partnership with the Private System | yes (Only at the level of diagnostic tests performance) | yes (Through Social Organizations) |
| Constituent elements of a HCN | Defined population | yes | yes |
| | Support Systems | yes (System oference and Network of Health Centers Clusters) | yes Network of Stations Observatories of Information and Communication Technologies in Health Systems and Services (OTICS) |
| | Logistics Systems | yes (Information Systems since 2006) | yes |
| | Well defined Governance Systems with the participation of users, workers and managers | yes (Since 2005) | yes |

it continues

allows the identification, knowledge and analyzation the local reality, as a result of an environment capable of proposing actions that interact with them[15]. In addition, in the Lisbon Region, the Hospital Reference Networks were implemented, which regulates, within a new institutional archi-

**Table 1.** continuation

| Dimension related to the conformation of Health Care Networks | | Lisboa Region | Rio de Janeiro |
|---|---|---|---|
| Innovative mechanisms to strengthen the PHC/ HCN | Service Portfolio | yes | yes |
| | Regulation | yes<br>Network of Health Centers Clusters (ACES) | yes<br>Creation of 'Regulator Protocol' and Electronic Records |
| | Projects of Telemedicine/Telenursing and Permanent Education | yes<br>(Since 2007) | yes |
| | Assessment | yes<br>Indicators contracted with the National Health System | yes<br>PMAQ and work processes followed and monitored monthly or quarterly |
| | Financial Incentive | yes<br>Introduction of additional payment as an incentive to perform specific services (e.g. immunization or a diabetes control program) and partial capitation to supplement services fee | yes<br>Variable PAB/ Fixed PAB<br>There is no teams' autonomy in the management of financial resources |
| | Career Plan of Workers associated with the PHC | yes<br>(Since 1988) | -- |
| | Health Centers with managers proximity administrating the Health Center | yes | -- |

* Giovanella[25].

tecture, the complementary and technical support relationships between the intervening entities through an electronic medical record, in order to promote patient access to healthcare services they effectively need, as well as to support the integrated interinstitutional information system.

In RJ, the Network of Observatory Stations for Information and Communication Technologies in Health Systems and Services (OTICS) was created, a complementary axis to the expansion of the PHC, to provide physical and technological support for the qualification of professionals and for the evaluation of PHC indicators. According to the selected studies, which focused precisely on electronic health records, they emphasize that their introduction contributed to the elimination of "duplicate" registrations, as well as the reduction of waiting time for consultations, examinations and procedures, further contributing for the quality of the records and for a better access for the population[16].

The PHC reform in the Lisbon Region has also led to the strengthening of management capacities to lead multi-professional teams and to support the adjustment to a new governance model designed to offer care services more adapted to the specific needs of the population. With this process, new leadership positions were created, however most of the appointed professionals had little or no management experience.

Thus, a training strategy was developed to provide leadership and management skills in

HCN, tailored to the needs of its tasks, through evaluation questionnaires and observations, but also analyzing the perceptions of new managers and clinical managers on the benefits derived from their participation in capacity building activities. However, one area where the Portuguese reform had made little progress was the expansion of the roles of nurses and other professionals to whom doctors could delegate some of their traditional functions[17].

From this perspective, the PACES training program created opportunities for health managers to analyze management problems and to share potential solutions with their colleagues. This had some positive effects and resulted in learning gains such as group spirit and networking habits among managers, which helped in their relations with regional authorities and in sharing strategies on how to stimulate the creation of new USF[11].

At the same time, in RJ, a new public governance was established between the state, financier and regulator, and the third sector, provider of health services through the OSS, having as main characteristics the extension of the decision-making autonomy in financial and organizational terms[14]. The analysis carried out by Costa Silva et al.[14] showed that the negotiation process in the municipality between municipal management and OSS is weak, establishing a relationship closer to subordination than to partnership and cooperation. This limits the development of management innovations to be introduced by the adoption of commissioning logic or by the institutionalization of the management evaluation of results.

Accordingly, the innovative mechanisms for strengthening PHC in the Lisbon Region have experienced users' accessibility and have secured a portfolio of services capable of offering a range of individual clinical care to the population enrolled in the list of GPs at different stages of life, aimed at covering the most common conditions and solving most of the problems of individuals and /or their families in different illness situations.

Similarly in Rio de Janeiro, the Service Portfolio aims to standardize the supply of care in the PHC units and determines what types of consultations and procedures should be performed with a list of services related to care for the adult, the adolescent and the child, the Mental and oral health, health surveillance and promotion, and the management of emergency and emergency situations[18].

In these scenarios there was also the standardization of regulation; In the Lisbon Region culminated in the creation of a network of Health Center groups (ACES)[19] to improve the coordination and efficiency of health services at the local level through better planning and sharing of resources. Each ACES is managed by a proximity team composed by an Executive Director, a Clinical Council (with four members representing the different professional groups) and a Management Support Unit (UAG).

In RJ, this process came about through the creation of the 'Protocol for the Regulator', which deals with referral protocols for medical specialties and diagnostic procedures[20], based on the Ministry of Health's Regulation System (SISREG), in order to establish the Care Regulation as a management function, which makes it possible to introduce mechanisms for ordering health care practices in SUS. Family doctors are in charge of each unit for the function of regulating to other points of care, for the SISREG direct online appointment, for the consultations to other specialists and for diagnostic tests throughout the HCN, in line with the proposal of the PHC to function as a communication center that coordinates the flows and co-flows of the care system[7].

In the Lisbon Region, telecommunication equipment and digital technology, such as the Telemedicine and Tele-nursing Projects, are used for the coordination of the HCN, which enables health care at a distance, providing information to patients, favoring preventive actions and creating alerts for nurses and physicians who can by direct contact with the patient, change therapies and habits without resorting to new consultations.

In RJ, the effective application of technological solutions such as Telemedicine and Telehealth aims at optimizing education, planning logistics, regulating care and implementing methods to provide multicentric research based on sustainability management strategies and on the development of new models.

Regarding the evaluation of PHC in the Lisbon Region, contractual performance indicators are used, introduced with a perspective to stimulating USF professionals, and their respective ACES in a set of actions. These actions should address accessibility, user satisfaction, economic performance, Child and maternal health surveillance programs, family planning, limited process data and intermediate outcomes.

In RJ, the working processes are monitored monthly or quarterly, depending on the level of

management, whether local or central. Teams that offer improvements in the quality of care receive more resources from the Federal Government. That is, the better the performance, the more financial incentives will be passed on. These incentives and evaluations also take place through the National Program for Improving Access and Quality of Basic Care (PMAQ-AB), created in 2011.

It is also worth noting that the fundamental reform ideas in the Lisbon Region have as financial incentive the introduction of the additional payment, that works as a stimulus to perform specific quality services (for example, immunization or a diabetes control program) and also partial capitation value to complement service fee; The development of home-based services and the strengthening of the role of entry point for PHC[21-24].

In RJ, the financial incentive occurs from two resources divided into two modalities, the fixed PAB and variable PAB. The fixed PAB is a value that remains practically fixed and fluctuates according to the population of the municipality and the variable PAB according to the performance of the manager and his/her team, as well as in the accomplishment of the established goals.

An innovative mechanism of HCN, in Lisbon Region, was the institution of a career plan for workers linked to the PHC aimed at planning and managing the organization practices. That context differs in Rio de Janeiro, causing difficulties to establish health professionals like nurses, technicians and, in particular, physicians, in addition to demotivation, partial fulfillment of workload, lack of knowledge about the PHC attributes, and backward-based vision in programmatic activities on services organization.

## Discussion

A comparative analysis was proposed between the two health regions (Lisbon & Tejo Valley and Rio de Janeiro) with the present case study, aiming to identify the PHC advances regarding HCN coordination and chronic conditions management. In general, it is worth mentioning that these localities have progressed regarding that objective, and they can observe policies inducing the macrostructure that end up reflecting in the PHC micropolitics.

The very constitution that legitimates the countries' health as a social right and universal access imposed new ways for the health system organization to the managers that could meet the main health demands of the population. Thus, given the demographic panorama at the current juncture, with a contingent of elder people that only increases, PHC is the only viable and cost-effective alternative to support the new reality.

According to the results, there are different rhythms regarding HCN in both regions. Lisbon implemented with greater speed, even for historical reasons, the PHC comprehensive model and today has reached a sufficient degree of maturity about the system coordination. On the other hand, Rio de Janeiro still suffers from historical remnants of a selective PHC[25]. It is also worth noting that RJ is a federative entity that has total autonomy in the health system management. However, in Lisbon, the decision-making processes and action plans are under the auspices of the Portuguese National System.

Results showed PHC substantial expansion regarding micropolitics over the last six years in both scenarios, and almost on equal proportions. Nevertheless, in Lisbon, it happened through the professionals' will, and in Brazil, through judicialization. A critical issue considered by RJ for the sustainability of the PHC technological model and HCN coordinator consisted of granting stable professionals, especially in the medical category, along with partial regimes of work contract and even employment bonds precariousness.

In RJ, the PHC expansion project was supported by the OSS, which are non-profit private sector institutions that work in a formal partnership with the State and collaborate in a corresponding manner as provided for the Organic Law No. 8080/90. In Lisbon, it happened incrementally and was developed according to the professionals' willingness and motivation to join a project for the PHC quality improvement.

Although the OSS are legal institutions in Brazil, the State has not developed sufficiently regulatory or inspection mechanisms to manage its processes, including the financial ones, which may open up possibilities for deviations or distortions. Such scenario has led to internal crises, PHC credibility and some questions about transparency in the application and use of the public good. Private interference causes the SUS (Brazilian Healthcare System) to be sometimes crossed by opposing forces, which end up undermining its fundamental principles, such as equity[11].

The study also showed that there are significant advances, in both places, of PHC in the coordination of HCN regarding Support, Logistics and Governance Systems along with the custom-

ers' ascription. In RJ, it was possible to identify local strategies to strengthen the PHC such as the Regulatory Protocol and Electronic Records that allow the user's care coordination to other points of attention.

In Lisbon, there are ACES with quality teams and clinical councils whose purpose is to revitalize the culture of clinical governance and quality supported by managers who are accountable for results that were previously negotiated and contracted.

It was also possible to observe other mechanisms to strengthen the PHC-Portugal with the creation of a family doctor career, in 1985. On the other hand, in Rio de Janeiro, the career plan is still not given although Law projects with such intentionality have been found[26]. The career plan is a major incentive for professionals' motivation, significance and involvement, especially in the medical category with PHC, which has more difficulties to link to the model.

Lisbon followed the reform implemented throughout the country, and there was a significant alignment between policies and investments made, with a focus on human resources and their training. The reform implemented in RJ brought interesting aspects regarding HCN structuring such as electronic medical records, OTICS, systematics of local assessment in an alternate way due to results, thus serving as inspiration for other main centers of the country.

Rio de Janeiro's HCN benefit from a population characteristic of being associated with the family team, something that the reform in Lisbon intends to replace with current listings of users attributed to the doctors.

The study also showed that there are differences in the PHC organization, even in the same region, and some of them are achieving more advances in HCN than others. That is entirely understandable because such performance is a result of intrinsic factors (service management form, employees' perspective, their motivation to do so, meaning of what they are doing, valorization and professional recognition, satisfaction, participation and community support), and extrinsic factors such as health policies, economics, legal apparatus and cultural competence[11].

It is worth noting that a health organization's development is directly proportional to the leadership process, professionals' management capacity, incentives and adequate resources in a progressive scale of care. The PHC are as expensive as hospitals from the economic viewpoint since they require a significant amount of financial investment to start functioning and have quality in the production of actions. However, if we consider the medium and long terms, the economic demand will be less and less for this technological model, which is a different logic from the hospital-centric that tends to require more and more resources. It is understood that researchers' involvement is positive in this process because they can highlight these aspects and help translate good practices and their adaptation to the local context[7].

Regarding regulatory and evaluation mechanisms both cities present complex models. In Portugal, a contractual model bases on a set of annual performance targets. In Brazil, the PMAQ seeks to create a quality performance benchmark for all municipalities.

It is worth emphasizing that the methodology used prevents from generalizations. The empirical material sample was selected for the authors' convenience along with the limitation of few existing works. The material analyzed was not classified according to the level of scientific evidence nor verified its internal consistency. The sample gathered technical and management documents of the regions, which may be embedded by subjectivities. It is necessary to add as limitations the publication bias and material selection only available online. There may be other physical sources not accessed by the authors; thus, an on-site case study would be interesting for future research.

However, the study contributed to knowledge advancement by bringing in a theoretical perspective about the advances of two regions regarding the HCN conformation to manage chronic conditions or diseases associated with aging. There are few studies with such purpose, and it can serve as a model for networks evaluation. It is necessary to clarify the historical, cultural, political and legal issues that eventually determine differences in the PHC performance that coordinates HCN in RJ and Lisbon.

## Collaborations

LV Lapão, RA Arcêncio, MP Popolin and LBB Rodrigues participated in the conception, design and interpretation of data, essay writing, critical review and version approval to be published.

## References

1. World Health Organization (WHO). *Primary Health Care*. Alma Ata: WHO Library Cataloguing-in-Publication; 1978.
2. Barreto MS, Carreira L, Marcon SS. Envelhecimento populacional e doenças crônicas: Reflexões sobre os desafios para o Sistema de Saúde Pública. *Rev Kairós Gerontologia* 2015; 18(1):325-339.
3. Starfield B. *Atenção Primária: equilibrio entre a necessidade de saúde, serviços e tecnologias*. Brasília: UNESCO, Ministério da Saúde; 2002.
4. Potter C, Brough R. Systemic capacity building: a hierarchy of needs. *Health Policy Plan* 2004; 19(5):336-345.
5. Mizrahi Y. Capacity enhancement indicators. Washington, 2004. [acessado 2016 set 1] Disponível em: http://info.worldbank.org/etools/docs/library/80314/eg03-72.pdf
6. Barringer BR, Jones FF. Achieving rapid growth: revisiting the managerial capacity problem. *Journal of Developmental Entrepreneurship* 2004; 9(1):73.
7. Mendes EV. *As Redes de Atenção à Saúde*. Brasilia: OPAS; 2011.
8. Lapão LV. The role of complexity dynamics in the innovation process within the new primary-care governance model in Portugal. *Innov J* 2008; 13:1-12.
9. Plesk P, Wilson T. Complexity, leadership, and management in healthcare organizations. *BMJ* 2001; 323(7315):746-749.
10. Yin R. *Case study research: Design and methods*. Beverly Hills: Sage; 1994.
11. Lapão LV, Dussault G. PACES: a national leadership program in support of primary-care reform in Portugal. *Leadership Health Serv* 2011; 24(4):295-307.
12. Brasil. Ministério da Saúde (MS). Departamento de Atenção Básica. *Histórico de cobertura da ESF no Brasil*. Brasilia: MS; 2014.
13. Rio de Janeiro. Secretaria Municipal de Saúde e Defesa Civil. Plano Municipal de Saúde do Rio de Janeiro, 2010 – 2013. Rio de Janeiro, 2009. [acessado 2016 jul 1]. Disponível em: http://www.rio.rj.gov.br/dlstatic/10112/3700816/4130215/PLANOMUNICIPALDESAUDE20102013.pdf
14. Costa e Silva V, Barbosa PR, Hortale VA. Parcerias na saúde: as Organizações Sociais como limites e possibilidades na gerência da Estratégia Saúde da Família. *Cien Saude Colet* 2016; 21(5):1365-1376.
15. Brasil. Ministério da Saúde (MS). *Guia prático do Programa de Saúde da Família*. Brasília: MS; 2001.
16. Soranz D, Pinto LF, Penna GO. Eixos e a Reforma dos Cuidados em Atenção Primária em Saúde (RCAPS) na cidade do Rio de Janeiro, Brasil. *Cien Saude Colet* 2016; 21(5):1327-1338.

17. Buchan J, Temido M, Fronteira I, Lapão LV, Dussault G. Nurses in advanced roles: a review of acceptability in Portugal. *Rev Lat Am Enfermagem* 2013; 21(spec):38-46.
18. Harzheim E, Pinto LF, Hauser L, Soranz D. Avaliação dos usuários crianças e adultos quanto ao grau de orientação para Atenção Primária à Saúde na cidade do Rio de Janeiro, Brasil. *Cien Saude Colet* 2016; 21(5):1399-1408.
19. Lapão LV, Dussault G. From policy to reality: clinical managers' views of the organizational challenges of primary care reform in Portugal. *Int J Health Plann Manage* 2012; 27(4):295-307.
20. Organização Panamericana de Saúde (OPAS). *Reforma da APS na cidade do Rio de Janeiro – avaliação dos três anos de clínica da família. Pesquisa avaliativa sobre os aspectos de implantação, estrutura, processo e resultado das clínicas da família na cidade do Rio de Janeiro*. Porto Alegre: OPAS; 2013.
21. World Health Organization (WHO). *Cuidados de Saúde Primários: Agora mais do que nunca*. Geneva: WHO Library Cataloguing-in-Publication; 2008.
22. Bodenheimer T, Wagner EH, Grumbach K. Improving primary care for patients with chronic illness: the chronic care model, Part 2. *JAMA* 2002; 288(15):1909-1914.
23. Macinko J, Almeida C, Oliveira E. Avaliação das características organizacionais dos serviços de atenção básica em Petrópolis: teste de uma metodologia. *Saúde em Debate* 2003; 27(65):243-256.
24. Grumbach K, Bodenheimer T. Can health care teams improve primary care practice? *JAMA* 2004; 291(10):1246-1251.
25. Giovanella L. Atenção Primária à Saúde seletiva ou abrangente? *Cad Saude Publica* 2008; 24(Supl. 1):S7-S27.
26. Rio de Janeiro. Secretaria Municipal de Saúde. Plano Municipal de Saúde do Rio de Janeiro, 2011 – 2014. Rio de Janeiro, 2013. [acessado 2016 nov 1]. Disponível em: http://www.rio.rj.gov.br/dlstatic/10112/3700816/4128745/PMS_20142017.pdf

Article submitted 03/11/2016
Approved 06/12/2016
Final version submitted 08/12/2016