The process of building up regional health management in the State of São Paulo: subsidies for analysis[1]

O processo de construção da gestão regional da saúde no estado de São Paulo: subsídios para a análise

Áquilas Mendes
Universidade de São Paulo. Faculdade de Saúde Pública. São Paulo, SP, Brasil.
Pontifícia Universidade Católica. Departamento de Economia. São Paulo, SP, Brasil.
E-mail: aquilasn@uol.com.br

Marília C. P. Louvison
Universidade de São Paulo. Faculdade de Saúde Pública. São Paulo, SP, Brasil.
E-mail: mariliampl@gmail.com

Aurea M. Z. Ianni
Universidade de São Paulo. Faculdade de Saúde Pública. São Paulo, SP, Brasil.
E-mail: aureanni@usp.br

Marcel Guedes Leite
Pontifícia Universidade Católica. Departamento de Economia. São Paulo, SP, Brasil.
E-mail: magle@uol.com.br

Laura C. M. Feuerwerker
Universidade de São Paulo. Faculdade de Saúde Pública. São Paulo, SP, Brasil.
E-mail: laura.macruz@usp.br

Oswaldo Y. Tanaka
Universidade de São Paulo. Faculdade de Saúde Pública. São Paulo, SP, Brasil.
E-mail: oytanaka@usp.br

Ligia Duarte
Universidade de São Paulo. Faculdade de Saúde Pública. São Paulo, SP, Brasil.
E-mail: ligia.duarte@uol.com.br

José Alexandre Buso Weiller
Universidade de São Paulo. Faculdade de Saúde Pública. São Paulo, SP, Brasil.
E-mail: jose.alexandre.bw@gmail.com

Natália Carolina Cairo Lara
Pontifícia Universidade Católica. Programa de Pós-graduação em Economia Política. São Paulo, SP, Brasil.
E-mail: nana_lara@hotmail.com

Lygia de Andrade Machado Botelho
Pontifícia Universidade Católica. Programa de Pós-graduação em Economia Política. São Paulo, SP, Brasil.
E-mail: ly_botelho@hotmail.com

Cristiane A. L. Almeida
Universidade de São Paulo. Faculdade de Saúde Pública. São Paulo, SP, Brasil.
E-mail: clocat@usp.br

Correspondence
Áquilas Mendes
Faculdade de Saúde Pública da USP
Av. Dr. Arnaldo, 715, Cerqueira Cesar.
São Paulo, SP, Brazil. CEP 01246-904.

1 This article presents the results of the research "Analyzing the Process of Constructing regional Management in the State of São Paulo - COAP/Health Care Networks", 2013, by professors and their students following the research line of Politics, Management and Health in the Postgraduate Program in Public Health of the USP, financed by the Pan American Health Organization (Opas) - Pact BR/LOA/12001125.001.

Abstract

This article presents the main results of the survey on the regional management building process in the State of São Paulo, during the discussion of the COAP / Care Networks, in order to provide a basis for understanding this process of regional health pact, focusing on the metropolitan areas of Bauru, Santos, Grande ABC and the Ribeira Valley. In addition to the results presented on the health regions studied, the methodology used in the development of the construction of profiles of the regions is itself a proposal for a methodology of analyzing regional health profiles. The first section presents the general methodology for analyzing health regions. The second part covers the results and discussion of the research, organized into two items. The first refers to the analysis of the profiles of the five São Paulo health regions surveyed. The second item analyzes the main aspects of the process of regional health pact in São Paulo, highlighting strengths and limitations, based on interviews with municipal managers and supporters of the Council of Municipal Health Secretaries of São Paulo in these regions.

Keywords: Health Regionalization; Regional Management; Health Care Networks; State of São Paulo.

Resumo

Este artigo apresenta os resultados gerais da pesquisa sobre o processo de construção da gestão regional no estado de São Paulo, durante a discussão do COAP/redes de atenção, com o intuito de fornecer subsídios para a compreensão deste processo de pactuação regional da saúde, com enfoque nas regiões de saúde de Bauru, Baixada Santista, Grande ABC e Vale do Ribeira, no estado de São Paulo. Além dos resultados apresentados sobre as regiões de saúde estudadas, a metodologia utilizada no desenvolvimento da construção dos perfis das regiões constitui em si uma proposta metodológica de análise de perfis regionais de saúde. A primeira parte do artigo apresenta a metodologia geral adotada para a análise das regiões de saúde; a segunda, abrange os resultados e a discussão da pesquisa, organizados em dois itens. O primeiro destes itens refere-se à análise dos perfis das cinco regiões de saúde pesquisadas no Estado. O segundo, analisa os principais aspectos do processo de pactuação regional da saúde em São Paulo, destacando potencialidades e limites, a partir de entrevistas realizadas com gestores municipais e apoiadores do Conselho de Secretários Municipais de Saúde de São Paulo dessas regiões.

Palavras-chave: Regionalização da Saúde; Gestão Regional; Redes de Atenção à Saúde; Estado de São Paulo.

Introduction

The Unified Health System regionalization process was once again placed on the political agenda of its management in 2006 with the Pact for Health, a perspective of locoregional links in the national and inter-state pact. It took on a faster pace in Brazil with the publication of Presidential Decree No. 7508 of July 28, 2011, in which the Organizational Contract of Public and Health Action (COAP) and the policy of the Health Care Networks (Brazil, 2011) were established.

The process of discussing the COAP in the States has been going on since the second half of 2012 and intensified from 2013 onwards, with particulars for each federal unit. In the state of São Paulo, through the municipalities and the Ministry of Health (SES/SP), the discussion on drawing up the COAP was very active and municipal and state managers have made great efforts to organize, provide and analyze the list of indicators addressed in Decree No. 7,508. In addition to the 101 COAP monitoring indicators, this decree guides the construction of the health map, which describes the distribution of human resources and actions and health services provided by the NHS and the private sector geographically, considering the capacity installed, investments and performance measured from the system health indicators.

Certain authors in the field of public health argue that in order for decentralization in health to play an organizational role the relationship with the health regionalization process becomes important (Ferreira, 2011; Lavras, 2011). Ferreira (2011), in particular, understands that regionalization should be understood as a process of organizing health actions and services in a region in order to ensure comprehensive care, the rationality of expenses and optimization of resources and equity, with a view to guaranteeing the right to health. Still, this author adds that regionalization should be understood as a management tool in the health system organization, used to ensure an efficient allocation of health care.

It is well-known that regionalizing the SUS, as a health decentralization policy, was included in the Basic Operational Norms (BON), mainly BON 93 and BON 96, and the Health Care Operational Norm (Hcon), imposing more institutionalization on this process, consolidating itself with the passing of the Health Pact in 2006, intensified by presidential Decree (Brazil, 2006; 2011). This intensification of the regionalization process accentuates conflicts between managers and inter-governmental actors who mostly encounter conflicts between local, regional/state and national identities (Souza, 2001)[2].

In the state of São Paulo, in particular, the decentralization of health was also marked by the process of decentralizing the State Department of Health (SES). The starting point for this process was the reform movement from the state government, throughout the Franco Montoro (1983-1986) government. In the last year of this government, SES / SP activity management was decentralized with the creation of 62 Regional Health Offices (Ersas), 47 in the interior and 15 in the metropolitan area. In the organizational dimension, the restructuring of the SES followed the principles of regionalizing and decentralizing services and basic health care (Mendes, 2005)[3]. Strictly speaking, São Paulo State participated in moments of centralization and decentralization leading up to the creation of the SUS. The role of state management in health services is considered of importance in coordinating municipal action plans and providing them with technical support. However, there is known to be a gap persisting in the state of São Paulo, to the extent that the state manager has not been presented as an effective coordinator of the state regionalization process, since the creation of the SUS (Mendes, 2005).

In general, the importance that the territorial dimension has taken in the process of regionalizing health policy is highlighted. The distribution of resources for health care that seeks to rationalize the actions and services provided to all citizens needs to be the object of the pact between the federal agencies, particularly the municipalities that make up the health regions. It is after all, through these

2 For a discussion of the challenges of health regionalization in the context of the country's metropolitan areas, specifically the Baixada Santista, see Ianni et al. (2012).

3 For further details of the path followed by the SUS in the State of São Paulo, highlighting the regionalization of the SES/SP, see Mendes (2005), specifically cap.2.

that most citizens' needs must be met, requiring a minimum number of actions and services.

In order to discuss the COAP implementation process in some regions of São Paulo, this article provides information for understanding the regional health pact process in the state, focusing on the health regions of Bauru, Baixada Santista, Greater ABC and Vale do Ribeira, examining their potential and limits. In addition to the results presented on the health regions studied, the methodology used in constructing profiles of the regions is itself a methodology of analyzing regional health profiles, offered as a product of research. The article, then, is organized into two parts. The first presents the general methodology for analyzing health regions. The second covers the results and discussion, structured into two items. The first refers to analyzing the profiles of each of the five São Paulo health regions that were the object of this research - Baixada Santista, Vale do Ribeira, Greater ABC and Bauru. The second item examines the main aspects of the regional pact health process in the state, highlighting strengths and limitations, based on interviews with municipal managers and supporters of the Council of Municipal Health Secretaries of São Paulo (Cosems / SP) of these regions.

Methodology for analysis

With a view to deepening understanding of the territorial dimension, the indicators proposed by the COAP and others not covered by Decree No. 7,508/2011, used for health map in the primary care pact in the indicators matrix of the State Health Secretariat / SP and Cosems / SP were analyzed. In addition, the indicators suggested by the SUS Monitoring and Management Assessment Panel, proposed by Tamaki et al. (2012), were also used, helping to understand the unique dynamics of each region. Flow indicators were analyzed, related to inter and intra-regional population movement – commuting to work or study and for hospitalization -, in order to recognize the consonance between the towns making up a particular health region in relation to inbound and outbound flows of residents in these parts of the territories.

The health regions analyzed were those of Baixada Santista, Greater ABC, Vale do Ribeira and Bauru. The criteria for choosing these regions were: tradition of constructing regionalized policies; metropolitan and non-metropolitan characteristics; different geographical locations in the state; peculiarities of socioeconomic conditions in the regions and in their health care networks; and participation in different São Paulo Regional Health Care Networks, recently defined in the regionalization process of the State. It should be noted that the health regions of Baixada Santista and Vale do Ribeira together make up the RRAS 07, while the Greater ABC Health Region has its own care network, RRAS 01, and the Bauru Health Region is part of RRAS 09, along with five other health regions.

Analysis of the region profiles is divided into five areas: i) socio-economic and budgetary information; ii) living and health conditions; iii) health surveillance; iv) health care network; and, v) dynamics of inter- and intra-regional population movement (flow analysis). The year 2011 was used for a preliminary survey, identifying the availability and capability of information to compose the desired matrix of regional analysis.

The fifth area, in particular, deals with an innovation in regional profile analysis. This is because we sought to incorporate a regional dimension seldom or never dealt with in the health sector. It is an analysis of commuter information provided by the 2010 Census, along with data from the Hospitalization Authorization (AIH). The objective was to understand the dynamics of inter and intra-regional population movement characterizing the health region. Thus, for the purposes of this article, we present analysis of only one region - Baixada Santista - it being considered more important to describe the methodological approach used than to present all the surveyed areas.

In a second, qualitative, stage of research, interviews were conducted with managers, municipal secretaries and supporters of Cosems / SP from the areas in question. This stage aimed to follow the COAP discussion process in these regions, in order to aid understanding of the regional health pact process in the state. Eight interviews were conducted with those considered key players in the regional pact process then underway: The Secretary

of Health for Jacupiranga, DRS Vale do Ribeira; the Cosems supporter for Vale do Ribeira; the Cosems supporter for Baixada Santista; Secretary of Health for the municipality of Mauá; Secretary of Health for Bauru, Secretary of Health for Pederneiras and the Cosems supporter for the Bauru region. The qualitative approach involved four aspects of interest to the research project: 1) identifying role and/or leadership in the regional health pact process; 2) the actors' understanding of the region / regionalization in the political, technical-operational, financial and installed structure dimensions; 3) attitude toward the COAP; and 4) attitude to care networks, especially the Cegonha and Urgency-Emergency networks.

Results and discussion

Analyzing the profiles of the five health regions

The regional and municipal indicators proposed for the four regions were analyzed and grouped by area studied. Indicators were identified that could compose an analysis matrix that would allow a better and simple way of identifying the regional profile and contribute to monitoring and evaluating regional SUS management. The analysis of regional inequalities, identifying the highest and lowest values that make up the regional mean, gave a view that contributes to this necessity and allows interventions seeking greater regional equity.

Area 1: socio-economic and budgetary regional health indicators

The Greater ABC is part of the Metropolitan Region of São Paulo (MRSP) and 6.13% of São Paulo's population can be found there, it is well urbanized and densely populated, with a high aging index and high GDP per capita. The metropolitan region of Baixada Santista (RMBS) is located on the coast of the state, and is quite urbanized with a high proportion of seniors and low sewage rate (Table 1). In 2011, the RMBS spent R $ 675.84 per capita on health, with 27.51% of this total from SUS transfer, and spending of own resources on health reached 22.28%. The region of Bauru is located in the interior of the state; it contains 1.45% of the population and 3.45% of the state area, with population density far below the state average, a high rate of urbanization and higher than average access to sewer network compared to the rest of the state. The region of Vale do Ribeira, which includes the cities on the south coast of São Paulo state, contains about 0.66% of the population and 5.35% of the state area, with population density far below the state average, and sewage system average that is lower than the average for São Paulo state and a high illiteracy rate (Table 1).

With regards the budgetary health indicators, the state of São Paulo, excluding the state capital, spends R$ 503.35 per inhabitant on health, of which 27.13% is from SUS transfer, corresponding R$ 136.57 per inhabitant/year. Own spending on health was R$ 361.84 per capita, whereas the available state revenues (taxes and constitutional transfers) were R$ 1.565,90. Thus, health spending in the state of São Paulo reached 23.11% of own resources (EC 29 link), as seen in Table 1.

The region with the highest per capita spending of own resources is that of Baixada Santista (R$ 503.39). At the same time, it has the lowest per capita revenue available (taxes and constitutional transfers), compared with the other health regions (R$ 1,731.52). This means that this region commits 29.1% of overall available revenue on own spending on health. This means greater commitment of public finances to health, when analyzed in comparison with the other regions. It is worth noting that the economically well off region of Greater ABC, with available per capita revenue of R$ 1,727.67, commits a mere 25.9% spending on health per capita; R$ 447.06. Another commitment even larger than that of this region is the per capita revenue available in Vale do Ribeira (R$ 1,346.90), corresponding to per capita spending of R$ 373.25, 27.7% of tax revenue, in the form of transfers.

Areas 2 and 3: Health conditions and health surveillance

Concerning health and living conditions and health monitoring, a large set of indicators was identified.

Vital statistics on infant mortality indicate that, in 2011, the Baixada Santista health area has the highest coefficient, 16.87 per thousand live births, compared to other regions, and is substantially higher than that of the state: 11.55 (Table 2). The same result is shown in relation to maternal

Table 1 - Socio-economic and budgetary health indicators from Area 1, the MR of Greater ABC and Baixada Santista, Vale do Ribeira and Bauru. São Paulo State – 2011

Indicators/period		São Paulo State	Greater ABC	RM Baixada Santista	Vale do Ribeira	Bauru Region
Socio-economic indicators	Population	41,587,182	2,566,690	1,678,519	273,823	597,410
	Demographic density – hab./Km2*	165.98	3,033.68	701.28	20.41	71.48
	Urbanization rate (%)*	95.94	99.50	99.79	71.16	94.63
	Sewer network (%) *	89.75	95.68	75.14	88.50	99.32
	Rate of illiteracy – aged 15 and over *	4.18	3.50	3.96	9.64	7.29
	Annual population growth *	1.36	0.89	1.23	0.13	1.05
	Femininity index	105.5	107.3	108.8	99.20	101.5
	Ageing rate	36.50	52.36	41.06	47.31	61.93
	Percentage of elderly	11.56	10.90	13.29	12.57	12.73
	Birth rate	14.66	14.11	14.98	13.27	14.90
Budgetary indicators	GDC *per capita* (R$)	32,449.07	34,165.74	31,196.96	14,051.60	23,959.61
	Tax revenue and const. transfers per capita	1,565.90	1,727.67	1,731.52	1,346.90	1,405.05
	Own spending on health per capita (R$)	361.84	447.06	503.39	373.25	335.30
	Own revenue applied in health. (%) – EC 29	23.11	25.88	22.28	27.71	23.86
	Total health spending per capita (R$)	503.35	644.12	675.84	498.11	412.96
	SUS transfer revenue per capita (R$)	136.57	186.26	161.83	123.54	79.43
	Total SUS transfer spending (%)	27.13	28.92	27.51	25.07	19.24

Source: IBGE, SES/SP and SIOPS. *Data from 2010 census.

mortality, with a rate of 59.65 per thousand live births, higher than that of other regions and the state itself (39.36). In fact, it can be seen that the data for the mortality group show the worst results in the Baixada Santista region (Table 2). The best situation for most indicators of this group is seen in the Vale do Ribeira region, except for mortality from prostate cancer, the Greater ABC region (12.99 per hundred thousand) and mortality from external causes in the Region of Bauru (50.72 per hundred thousand) (Table 2).

Regarding the morbidity and other groups, the worst results were identified in the Bauru region in the prevalence of dialysis patients (54.90 per 100 thousand inhabitants) and the hospitalization rate for older people with hip fractures (27.48). The Baixada Santista Health Region got the worst results in relation to the incidence of congenital syphilis (3.06), the proportion of live births to teenage mothers (15.87), calculated using the number of births with information on the mother's age (considered births), and the conditions accompanying the Bolsa Família Program coverage (PBF) (45.73%). In the proportion of live births with low birth weight and stroke hospitalization rate per 10,000 inhabitants over 40 years old, insufficient results were shown in the regions of Greater ABC (9.43) and Vale do Ribeira (27.87) respectively (Table 2).

Analyzing the best results, we note that the Vale do Ribeira Region covers most of the indicators. The following were recorded: congenital syphilis incidence rate (1.92), proportion of live births with low birth weight (6.98) and the proportion of live births to teenage mothers (12.48) - same index as the Greater ABC region.

In turn, four indicators with the best results were: congenital syphilis incidence rate (1.92) - Vale do Ribeira Region; prevalence of dialysis patients (54.90 per 100 thousand inhabitants) - Baixada Santista region (32.41); stroke hospitalization rate per 10 thousand inhabitants aged over 40 (20.98) - the Greater ABC region; and follow-up coverage of the PBF conditionalities (62.21%) - Bauru Region.

With regard to area 3 - Health surveillance, Table

Table 2 - Regional health conditions and health surveillance indicators in areas 2 and 3 of the MR Greater ABC and Baixada Santista, and the Vale do Ribeira and Bauru Regions, SP, 2011

	Indicators/period	São Paulo State	Greater ABC	RM Baixada Santista	Vale do Ribeira	Bauru Region
Area 2 — Health Conditions	Infant mortality (per thousand live births)	11.55	11.79	16.87	10.10	10.57
	Neonatal infant mortality (per thousand live births)	7.90	7.98	10.86	7.60	7.82
	Maternal mortality (per thousand live births)	39.36	27.60	59.65	24.13	0
	Breast cancer mortality (per hundred thousand)	16.49	17.84	21.60	10.27	11.97
	Prostate cancer mortality (per hundred thousand)	13.43	12.92	17.92	15.99	16.18
	Mortality from external causes (per hundred thousand)	57.45	53.22	62.08	64.64	50.72
	Premature death <70 DCNT (per hundred thousand)	322.70	332.25	410.92	323.50	327.89
	Incidence of congenital syphilis	2.56	2.39	3.06	1.92	2.13
	Prevalence of dialyses	49.02	40.17	32.41	40.17	54.90
	Hospitalization for stroke >40y	23.34	20.98	22.69	27.87	23.52
	Hospitalization hip fracture	24.20	23.28	10.42	26.15	27.48
	Low birthweight live births	9.3	9.43	8.63	6.98	9.41
	Live births to teenage mothers	14.77	12.48	15.87	12.48	15.68
	Meeting PBF coverage conditions (%)	64.28	50.11	45.73	59.71	62.21
Area 3 — Health surveillance	Investigated infant deaths (%)	62.98	75.68	92.06	72.84	17.02
	Investigated maternal and suspected WoCBA deaths (%)	86.73	91.24	90.78	78.33	49.41
	Deaths from defined underlying cause (%)	93.90	98.70	97.38	89.17	91.85
	Cured TB cases (%)	79.89	83.82	80.64	68.97	70.31
	Cured leprosy cases (%)	89.45	90.63	91.00	73.91	73.68
	Closed NCD cases (%)	91.33	94.71	88.39	88.02	89.14
	Tetravalent vaccine coverage (%)	98.65	98.48	99.64	102.46	104.11
	Water quality samples analyzed (%)	25.85	30.03	45.58	5.49	14.23
	Health units with established violence notification services (%)	2.74	5.34	4.41	7.3	2.51

Sources: SIM, SINASC, SINAN, SISAGUA, SIA and SES/SP

2 shows the indicators related to deaths in 2011 and from this it can be seen that: for the proportion of child and fetal deaths investigated indicator, the MR Baixada Santista presents the best result (92.06%), while the Bauru region recorded the worst performance (17.02%). As for the proportion of maternal and women of childbearing age deaths indicator (WoCBA) investigated for presumed causes of maternal death, the Greater ABC region showed the most satisfactory result (91.24%) and the Vale do Ribeira Region (49. 41%), the worst. Regarding the proportion of recorded deaths with defined underlying cause indicator, the result presented above follows the same profile, that is, the best performance was in the Greater ABC Health Region (98.70%) and the weakest result in the Vale do Ribeira Region (89.17%).

Also according to Table 2, we can see some better results for health surveillance indicators: a) for the Greater ABC region in relation to the proportion of cures in cohorts of new cases of pulmonary tuberculosis (83.82%) and the proportion of cases diseases with compulsory notification (DNC) closed after notification (94.71%); b) for the Region of Bauru the tetravalent vaccine coverage indicator (104.11%) is noteworthy; c) for the Vale do Ribeira Region, there is the proportion of health facilities with established violence notification services (7.3%); d) for the Baixada Santista region, the indicator concerning cure rate of new cases of leprosy diagnosed in the early

cohort (91.00%) and the proportion of water quality samples examined for total coliform parameters, residual chlorine and turbidity indicator (45.48%).

Analyzing the worst results in these health surveillance indicators indicates the following situation: the Vale do Ribeira region has the worst results for indicators of cure rate in the cohorts of new cases of pulmonary tuberculosis (68.97%), the proportion of cases of diseases with compulsory notification (CND) closed after notification (88.02%) and proportion of water quality samples examined for total coliform parameters, residual chlorine and turbidity (5.49%). In the Region of Bauru the following worst indicators were identified: cure rate of new cases of leprosy diagnosed in the early cohort (73.68%) and proportion of health facilities with established violence notification services (2.51%). The Greater ABC region has the worst situation for the tetravalent vaccine coverage indicator (98.48%).

Area 4: Regional health care network indicators

For the purposes of this analysis, the 22 indicators within this area were grouped into six groups indicating the health care dimensions, the structure used and general information about the health care network.

Concerning the Group 1 indicators- General coverage, the Greater ABC region had the greatest supplementary health coverage, approximately 58.34%, above the figure for the state of São Paulo, around 9.86%. The Baixada Santista regions had lower coverage, 40.40% and 33.79%, respectively. As for the proportion of hospital services with contracted aims, this was low and, in the Vale do Ribeira region, null. When referring to the service structure, the best tomography coverage per thousand inhabitants is in the ABC Region (24.47) and the worst in the Vale do Ribeira Region (12.74). Regarding doctors per thousand inhabitants this pattern is repeated, especially in the leadership of the Greater ABC region (1.78), followed directly by the Baixada Santista region (1.72). In turn, the beds per thousand inhabitants was greater in the region of Bauru (2.2), indicating the primacy of the interior in the availability of beds.

In the analysis of Group 2 - Primary care, the region that performs the most basic medical consultations per inhabitant is the Vale do Ribeira (1.84), a pattern repeated in emergency consultations (0.36). When analyzing the proportion of admissions to primary care for sensitive conditions, the highest result is in the Bauru region (18.57), indicating a comparatively worse situation of primary health care together with a larger number of beds in small hospitals , which also impacts this type of hospitalization.

Group 3 - Oral health, shows greater coverage of basic oral health teams in the Vale do Ribeira (42.23) and Bauru (37.26) regions, reflecting a better average of collective actions concerning supervised brushing. Of these indicators, only the Bauru region showed better first dental appointment coverage (27.86). Group 4 - Women's health showed a better situation in the Vale do Ribeira region, with all indicators associated with better organized primary care. The exception is for the proportion of pregnant women with at least seven prenatal consultations (60.02%).

With regard to Group 5 - Urgency and emergency, the proportion of deaths in hospital admissions for acute myocardial infarction (AMI) is similar in all regions and close to the state average. It is noteworthy that the coverage of the Mobile Emergency Service (SAMU 192) reaches higher figures only in the Baixada Santista region (3.4). It is important to note that this service has only recently been deployed across the whole state, directly affecting the magnitude indicated.

Finally, Group 6 - Mental health has null indicators in the Vale do Ribeira region, with low mental health services coverage (Caps) and a higher proportion of psychiatric beds in general hospitals only in the Greater ABC region (13.51).

Area 5: Dynamic of inter abd intra-regional population movement

Commuting, the regular movement of individuals travelling to another municipality to work or study is a survival strategy for many in Brazil and is no longer limited to large urban conglomerates. Since the 1980s the importance of commuting has grown in the midst of profound changes in the Brazilian mi-

gratory behavior[4] and technological alterations that are provoking land occupation, de-concentrating production, impacting on the development of new urban nuclei and forming disperse, fragmented cities.[5]

Given these intense social changes, it becomes necessary to identify new forms of population distribution. Thus, studying the population commuting enables an approach of understanding the intensity and direction of flows of people, helping to grasp the logic of the territorial dynamics of a particular region. Even if the movements for work and study are not the only ones established in a territory, they represent an important part of the dynamics the population's everyday movement.

It is considered, then, that investigating flows not directly related to health care can contribute to developing reflections that help identify areas that have greater coherence to the social and economic logic of the region, contributing to constructing health regions with a higher municipal integration capacity in managing health actions and services.

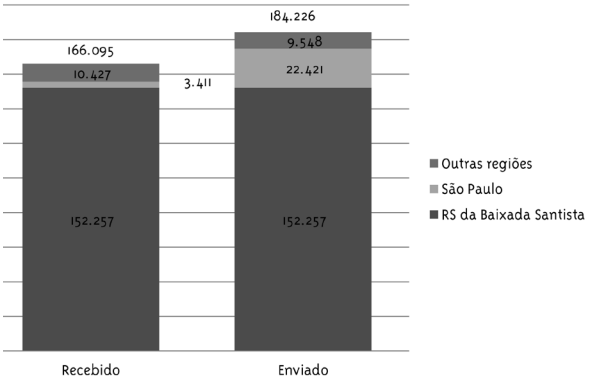
Regarding this area, the analysis of commuting and flows for hospitalizations for the region, presented below, only refer to the health region.

Baixada Santista Health Region

Regarding the analysis of commuting, in the Baixada Santista Health Region the main destination for those moving out of their municipality of residence to work or study are cities within the same health region (11.8 %), followed by São Paulo city (1.7%). Of the 166,095 people who are go to cities that make up the Baixada Santista Health Region to work and/or study, 152,257 (91.7%) are from municipalities within the region, while 3,411 (2.1%) originate in São Paulo city and 10,427 (6.3%) in other regions (Figure 1).

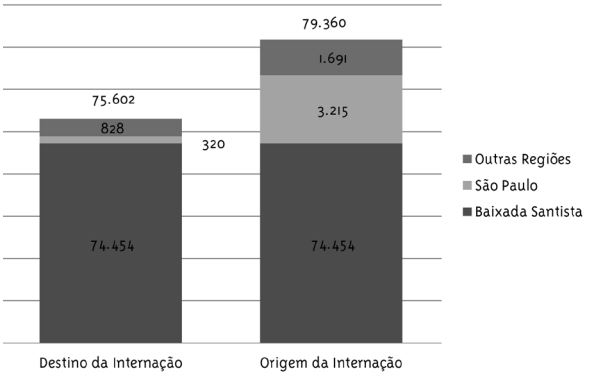
Analysis of information on the origin and location of bed admissions in the Baixada Santista Health Region is also shown in Figure 2, and identifies that, in 2011, of 79,360 admissions originating in the region, 25.7% occurred in cities other than that in which the patient resides. The municipality of São Paulo accounts for 4.1% of admissions originating in BSHR and other regions, for 2.1%. Regarding the origin and location of the hospitalization, it can be seen that the BSHR has a negative balance of patients. While 79,360 authorizations for hospital admissions originated in the cities that make up the BSHR, 75,602 were destined for municipalities in this health region (Figure 2).

Figure 1 - Volume of commuters into and out of the Baixada Santista and São Paulo Health Region, 2010/2011



Source: IBGE 2010. SIH/SUS 2011—SUS Hospital Information System

Figure 2 - Origin and destination of bed admissions in the Baixada Santista Health Region, 2010/2011



Source: IBGE 2010. SIH/SUS 2011— SUS Hospital Information System

4 For more, see Instituto Brasileiro de Geografia e Estatística - IBGE. Reflexões sobre os deslocamentos populacionais no Brasil. Série Estudos e Análises, n. 1. Available at: <http://www.ibge.gov.br/home/estatistica/populacao/reflexoes_deslocamentos/deslocamentos.pdf>.

5 Para esse entendimento, ver Harvey (1992).

Table 3 - Regional health care network indicators in Area 4 of the Greater ABC and Baixada Santista MR, and the Vale do Ribeira and Bauru Regions, SP, 2011

Indicators/period		State of São Paulo	Greater ABC Region	Baixada Santista MR	Vale do Ribeira Region	Bauru Region
G1 General coverage	Supplementary health care coverage (%)	9.86	58.34	40.40	10.29	33.79
	Hospitals with contracted goals (%)	8.03	19.99	1.25	0	7.14
	Cov. tomography (per thousand inhabitants)	19.05	24.47	19.83	12.74	19.90
	Cov. bed (per thousand inhabitants)	1.60	0.95	0.93	0.88	2.2
	Cov. doctor (per thousand inhabitants.)	2.08	1.78	1.72	0.93	0.44
	ICU bed per bed (%)	7.21	11.58	11.23	2.72	5.97
	Hospitalization rate. (per inhab./year)	5.63	4.87	4.66	5.33	6.22
G2 Primary Care	Basic medical consultation (per inhab./year)	1.63	0.87	0.98	1.84	1.65
	Urgent medical consultation (per inhab./year)	0.46	0.28	0.32	0.36	0.14
	State Population Coverage Primary Health (%)	77.71	71.22	71.90	120.19	66.59
	Proportion of Bed admissions in sensitive conditions	15.94	15.31	14.94	12.19	18.57
G3 Oral health	Public action supervised brushing	2.77	1.67	1.77	7.45	8.18
	Cov est. team. Oral health (%)	30.85	25.75	27.22	42.23	37.26
	Cov. first. cons. dent. (%)	9.86	6.54	10.14	7.32	27.86
G4 Women's health	Cytological exams Ratio women. 25 to 64	0.52	0.46	0.42	0.78	0.42
	Ratio mammogram women 50 to 69	0.31	0.28	0.27	0.48	0.23
	Prop. Normal births (%)	39.95	35.20	41.73	60.02	29.30
	Prop. Preg. 7 cons. or + PN (%)	77.85	79.39	74.84	60.02	80.45
G5 Urgência e Emergência	Prop death in hospital intern. IAM (%)	15.80	14.40	16.30	16.67	16.76
	SAMU Coverage	0.30	0.23	3.4	0.37	0.27
G6 Mental Health	Caps coverage	0.68	0.82	1.16	0	0.59
	Ratio psychiatric bed in general hosp. per general bed	1.16	13.51	1.20	0	0

Sources: CNES, ANS, SINASC, SIA, SIH and SES/SP

Analysis of key aspects of the regional health pact process in São Paulo

Protagonism and/or leadership in the regional pact process

The statements reveal very different situations regarding the political protagonism of the actors, reflecting each respondents' perception of the pact in their region, which reflects their degree of integration in the process and accumulated political maturity.

In the Vale do Ribeira there is almost no political protagonism of local managers in the regional pact process. A hierarchical relationship and dependence on the state management, on the DRS predominates and, given the current design of constructing a single unified Vale do Ribeira and Baixada Santista, RRAS, there is a certaing situation of "appendix" in the relation of the former to the latter. The existence of a health consortium, traditional in the Vale do Ribeira, seems to offer more support to the manager of this region than the current proposal of regionalization and RRAS.

This scenario worsened after the change of managers - Health Secretaries - in 2013, following the 2012 municipal elections. In a context of extreme political and administrative fragility, such changes have opened sides to place people with weak training and knowledge of the area and linked to partisan political interests in Health Care posts. Against a backdrop of weak administration, policy and

capacity, this dynamic has contributed, according to some testimonies, to deepening the dislocation and the fraying of intra-regional relations. Instead of developing an agreed project management, the dynamics of exchanging favors between managers still dominates, eroding the possibility of developing a stronger and solidarity pact in the region.

In Bauru region the protagonism of the municipality headquarters is evident, with greater political, technical and operational, financial and installed structure strength. However, this has developed dialog actions with other municipalities towards structural strengthening in that region.

In the ABC region, covering seven cities, the protagonism of municipalities is much higher. Despite the political, technical-operational, financial and installed structure leadership of some cities such as Santo André and São Bernardo do Campo, for example, the characteristic of this region has been constructing and strengthening all the municipalities, revealing a more shared and flat dynamic. This dynamic seems to reflect the metropolitan region's tradition of consortium, created to discuss joint interest public policy. Anchored in this political institution, the health regionalization process is finding more support and political and operational capacity.

The balance in this region is that, through this scenario, partisan differences between managers, differences in the political capital of each municipality and the technical-administrative differences are more easily faced and overcome, as negotiations and possible pacts are discussed openly.

In the Baixada Santista region, the scenario is of a somewhat disassembled process that was being built. The assessment is that the current board management has lost political leadership, restricting themselves to more hierarchical than board action. There is also reference to countless changes of managers in the region, compromising their links with the regionalization process.

What stands out in particular is the "disassembling" produced by state management action, with the project of establishing state-wide decisions made by the governor throughout the regional pact process in hospitals in the region. Against this backdrop, the weakness of the current Board contributes to this situation.

Cosems supporters have played an important role in the different regions, not only in relation to managers but also in articulating different political and regional potential. Inserting this actor into the regionalization process is "empowering" local management by streamlining and diversifying information that previously only came via DRS, besides collaborating in the broader understanding of regionalization processes. There are also positive references to the support of the Ministry of Health, playing roles similar to those of Cosems supporters.

Overall, the São Paulo Health Care Secretariat (through the political and administrative figures of the Regional Health Divisions - DRS, the Board of Management Coordinator etc.) is perceived as a power holder, but with poor effective political protagonism in the regions. In almost all the statements, the state government is seen as distant, authoritarian, purely bureaucratic-administrative, if not actually complicating the process through exclusive control of hospital and medium complexity services under its provision. The role of provider, very strong with regard to state resources, unproductively marks the relationship with municipalities, undermining the political process of regionalization.

There is recognized extreme political and administrative weakness of municipal managers in general. Although there are some well-trained, politically educated and mature managers, the vast majority of Municipal Health Secretaries face great difficulty in appropriating all the instruments of local/regional management. There is some decoupling between the regional pact propositions - the ministerial orders, the Health Agreements etc. - and managers with little experience in managing and controlling this political-administrative framework.

In this sense, producing a better quality regional agreement process, that is, more shared, supportive and truly inter-federative, must involve political and technical training for municipal managers.

The actors' understanding of region/regionalization in its political, technical-operational, financial and installed structure dimension

Only one of the interviewees mentioned the political issue of the federative pact as being central to the health regionalization process. However, all of them,

in one way or another, approached this issue, especially those who mentioned the role at a state level.

The manager who brought up this issues recognizes the extent to which the area of health – by setting off the regionalization process – is, within the country, the protagonist of a significant political strategy, not only for the area of health but for public policy in general. This manager also recognized that, by proposing regional agreements health is, in some way, introducing a new aspect to inter-federative policies in Brazil; implying a leading role in the successes and challenges of this action. In this aspect, the region issue is central, as it articulates different levels of management.

Concerning inter-federative action, in their statements the actors from Bauru and the ABC are unanimous in saying that the most shared and supportive regional construction experiences strengthen all stakeholders, resulting in more effective and efficient actions for all municipalities participating in the process because the arrangements are more feasible, objectives are defined in common agreements; a process that produces greater political maturity in managers.

The idea of sharing both the discussions and the dealing with differences and interests and technical support between more experienced and less experienced municipalities or even between state and Ministry of Health and municipalities - a more horizontal and supportive relationship - produce stronger and more consistent results with respect to regional health. It is also recognized that this process "empowers" the weakest municipalities.

The perception is that the more fragile the political and administrative construction of the Management Board, the more susceptible this Board is to interference from municipal party, regional or state politics, to the private and personal interests of secretaries and mayors, and to the exchange of favors at the expense of effective regional pact.

There is mention of the fact the State (federal state sphere) remains at arms length from the regionalization process (because it has financial resources to manage its "own" services), which has been used as a management strategy by this federal entity. There are mentions of underfinancing certain health regions, or the "difficulty" of operating networks, for example. Or even the creation of a "parallel network" to the current agreement process. This political phenomenon establishes "bartering" of users for health services, compromising the entire process of regionalization and the pact.

It was mentioned that the existence and/or permanence of competent technical teams committed to the public good has been a factor in maintaining established pacts, and even in assuring the quality of ongoing processes in the regions. The action of these teams, often through the Technical Chambers of the DRS, has guaranteed more shared and structured processes, especially where regionalization is also fairly crude or unstructured. There are references to the fact that, in many cases, the technical capacity of the technical teams affects or even determines the municipality's leadership in the Board of Management.

One of the regions, the ABC, says it has been very difficult to get out of the care agenda, although it has been successfully dedicated to introducing further demands in Management Board discussions, together with the DRS etc. Agendas such as surveillance (epidemiological and health), health promotion, occupational health surveillance, mental health etc.

Attitude towards the COAP

The COAP was not often mentioned by respondents. What stands out, when quoted, is the recognition that it is a necessary instrument for raising funds, however, as an instrument of regional agreement, of political and administrative consolidation, is rarely mentioned.

Only one of the interviewees, from Sao Bernardo do Campo, said that the COAP somehow reverts, other shapes, the agreement process put to one side by the Ministry of Health for a time. In this sense, for this interviewee, the instrument is a sign of the federal government's resumption of the regional pact process. For the Secretary of Bauru, the COAP is necessary in view of the increasing technological incorporation in health. According to him, this technological incorporation will involve a recurring and ongoing process of negotiation, as the different municipalities and the State are provided with services at various technological levels.

There is also the perception that signing the

COAP includes conflicts that must be faced by the actors involved.

Attitude towards care networks, especially the Cegonha and Urgency-Emergency networks

The role of provider of the state of São Paulo, very strong in relation to hospital resources, does not productively mark the relationship with municipalities, compromising the political process of regionalization. This tension is clear in the regulatory process.

Mention is made of the fact that, in the absence of political protagonism on the part of managers, the tension in the process of constructing the networks is higher..

There is a certain contradiction between the maps and the health networks. In the case of Baixada Santista, these instruct the maps. But in this region, as in the Vale do Ribeira, negotiation of municipalities still prevails over that of the regional network. What exists is more a system of regulating vacancies than actual care networks. There is also tension between the strategies aimed at primary care and networks, because they were regions where municipalities invested heavily in the extending PC.

Final Remarks

Analysis monitoring of regional health management deserves treatment integrated between the regional profiles of health conditions and the development of the political process by the key players in constructing regionalization. This form of analysis guided the search results presented, and we understand that they serve to support a deepening of the health regionalization process, which was mainly stimulated after the publication of Decree No. 7508/2013. It is important to reaffirm that, by stimulating the advance of the regionalization process, even with all the problems revealed by the research and described here, the area of health is the protagonist in a major political strategy, not only in its own area but for public policies general. In proposing a health regional pact in some way, something new is introduced into inter-federative policies in Brazil, which means being the protagonist of the successes and challenges of this action. In this respect, we believe that the issue of region is central to the future development of the SUS, as it articulates different levels of management.

The analysis of the four selected regions contributed not only to identifying the set of indicators to be used in regional analysis but also the being able to understand its diversity. It found that higher spending on health or greater presence of the care network infrastructure does not necessarily coincide with better living and health condition indicators, highlighting the need to consider regional peculiarities when interpreting the indicators. This understanding is critical to adopting different strategies for developing regional pacts, for constructing health regions and for effective adherence to the important proposed instrument, the COAP. It is noted that flow analysis, in particular the analysis of the regional commuting brings an important methodological innovation to this type of study. This is because it aims to capture the dynamics of inter and intra-regional population movement through the analysis of commuting to study and work, expanding the knowledge of the regional territory beyond the health sector.

Regarding the qualitative approach, the study showed, in general, the great challenge of the need to identify articulation mechanisms between the various actors in this health regionalization process. Emphasis was placed on the fact that the state level could still present difficulties to effectively coordinating this process, restricting itself to the role of managing the delivery of its own services. In this sense, the historic construction of regional technical support that can enhance the committed solidarity of managers in the constructing the regions has not been strengthened in the state of São Paulo.

Also highlighted was the need for agreements to include solidarity for the municipalities with the highest socioeconomic, epidemiological, demographic and service offering difficulties in order to strengthen the set of municipal managers and enable the regional challenges to be addressed better.

Also worth mentioning are the weaknesses in the political and administrative construction of the Regional Management Board, making it more vulnerable to special interests at the expense of the collective. Thus, strengthening the region requires these boards to advance their agendas beyond health care, incorporating regional management as a whole

in order to broaden the discussion of inter-sectoral public policies and strengthen the construction of the regional territory.

Regionalization, more than a process of organizing actions and health services in the territory, aims to ensure comprehensive care, it is a political construction that should encourage dialogue among local actors and federal managers to recognize and cope with the health needs of specific territories.

References

BRASIL. Ministério da Saúde. Portaria nº 399/GM, de 22 de fevereiro de 2006. Divulga o Pacto pela Saúde 2006 – Consolidação do SUS e aprova as Diretrizes Operacionais do Referido Pacto. *Diário Oficial da União*, Brasília, DF, 22 fev. 2006. Disponível em: <http://dtr2001.saude.gov.br/sas/PORTARIAS/Port2006/GM/GM-399.htm>. Acesso em: 7 jan. 2014.

BRASIL. Ministério da Saúde. Secretaria de Gestão Estratégica e Participativa. Decreto nº 7.508, de 28 de junho de 2011. Regulamentação da Lei nº 8.080/90. *Diário Oficial da União*, Brasília, DF, 28 jun. 2011. Disponível em: <http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2011/decreto/D7508.htm>. Acesso em: 7 nov. 2014.

FERREIRA, J. B. B. F. O processo de descentralização e regionalização da saúde no Estado de São Paulo. In: IBAÑEZ, N.; ELIAS, P. E. M.; SEIXAS, P. H. D. (Org.). *Política e gestão em saúde*. São Paulo: Hucitec, 2011.

HARVEY, D. *A condição pós-moderna*. São Paulo: Loyola, 1992.

IANNI, A. et al. Metrópole e região: dilemas da pactuação da saúde. O caso da Região Metropolitana da Baixada Santista, São Paulo, Brasil. *Cadernos de Saúde Pública*, Rio de Janeiro, v. 28, n. 5, p. 925-934, 2012.

LAVRAS, C. Descentralização, regionalização e estruturação de redes regionais de atenção à saúde no SUS. In: IBAÑEZ, N.; ELIA, P. E. M.; SEIXAS, P. H. D. (Org.). *Política e gestão em saúde*. São Paulo: Hucitec, 2011.

MENDES, A. *Financiamento, gasto e gestão do Sistema Único de Saúde (SUS)*: a gestão descentralizada semiplena e plena do sistema municipal no Estado de São Paulo (1995-2001). 2005. Tese (Doutorado em Ciências Econômicas) - Instituto de Economia da Universidade Estadual de Campinas, Campinas, 2005.

SOUZA, R. R. A regionalização no contexto atual das políticas de saúde. *Ciência & Saúde Coletiva*, Rio de Janeiro, v. 6, n. 2, p. 451-455, 2001.

TAMAKI, E. M. et al. Metodologia de construção de um painel de indicadores para o monitoramento e a avaliação da gestão no SUS. *Ciência & Saúde Coletiva*, Rio de Janeiro, v. 17, n. 4, p. 839-850, 2012.

Authors' contribution

Mendes coordinated the research. Writing and revising was done together, based on debate between the authors.

Received: 26/02/2015
Approved: 13/03/2015