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# Fighting inequalities in the access to health services: A study of the role of decentralization and participation

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## Fighting inequalities in the Access to Health Services: a study of the role of decentralization and participation<sup>1</sup>

Vera Schattan P. Coelho, Marcelo F. Diasand Fabiola Fanti

One of the promises of the SUS, was to mitigate well-known inequalities in access to healthcare. To tackle these inequalities, a decentralization program was implemented, significant incentives for basic care and for public participation have been provided, and substantial additional funds became available. The effects of these initiatives have been analyzed from an inter-regional and/or inter-municipal perspective. In this paper we take a step further in analyzing the evolution of the supply and consumption of public healthcare services within the municipality of São Paulo between 2000 and 2008. We show that while there has been a reduction in the disparity between the offer and consumption of public health services across the areas with the best and worst indices of income, education and health, there was also a small increase in the inequality in the distribution of basic consultations within the poorest areas. These distributive results are discussed in the light of two dynamics: decentralization and public participation.

The Unified Health System (SUS), a public health system with universal and unconditional coverage, was enacted by the 1988 so-called 'Citizen Constitution'. One of the great promises of the SUS, was to mitigate well-known inequalities in access to healthcare. Many studies, between 1970 and 1980, had highlighted distortions in the funding for and access to healthcare services. Complex medical procedures and wealthier regions received significantly more funds than basic procedures and poorer regions (Akerman 1994; Coelho 1996). These distortions resulted in skewed access to the public healthcare system, in many cases favoring the middle and upper-middle classes to the detriment of poor populations.

Starting in the 1990s, the SUS, in an effort to solve these problems, implemented an aggressive decentralization program and provided significant incentives for basic care and for public involvement, as well as reforming management

Center for Analysis and Planning) and *Citizenship Development Research Center/IDS* with support from DFID. We would like to thank Felipe Szabzon for helping with background material.

<sup>&</sup>lt;sup>1</sup> This chapter presents results from the 'Participation and Health Policy in the City of São Paulo' research program carried out by *Centro de Estudos da Metrópole* (CEM, Center for Metropolitan Studies), funded by *Fundação de Amparo à Pesquisa do Estado de São Paulo* (São Paulo State Foundation for Research Support), *Centro Brasileiro de Analise e Planejamento* (CEBRAP, Brazilian

of these services and substantially increasing available funding<sup>2</sup>. The creation within the SUS of two levels of management, the full management of basic care and the full management of the municipal system, has contributed to reinforcing the role of the municipality in managing the healthcare system. Also important was that since 1998 federal fiscal transfers for basic care have been automatic and calculated in *per capita* terms. In the case of public participation, health councils were implemented as a mechanism responsible for bringing civil society organizations (CSOs), service providers, and public officials together addressing core issues of priority-setting and accountability. This led to the creation of a national health council, of health councils in all twenty-six states and in nearly all the 5,561 municipalities.

In the early 2000s, when we started the "Social Participation and Distribution of Public Health Services in the City of Sao Paulo" project, many studies had already shown the impact of the aforementioned initiatives, suggesting that while the situation was a far from being ideal, it was possible to identify significant increased access to health services. However, these analyses were not conclusive regarding the ability of these initiatives to promote greater equality in the distribution of resources. Medici (2001), Ugá et al. (2003), and Marques and Arretche (2004) drew attention to the fact that the improvements found reflected increased resource invested rather than changes in the distributive profile; that they said remained skewed in favor of more prosperous regions. Souza (2003) and Melamed and Costa (2003), on the other hand, stated that these measures had increased equality in the distribution of resources and the access to services across Brazil's regions, states and municipalities. Regarding participation, the authors who had analyzed the health councils have also reached ambivalent conclusions, identifying grey areas with many cases of relatively little achievement and a few successful cases (Carvalho 1995; Boschi 1999; Pozzoni 2002;).

From our perspective, the fact that these evaluations did not consider what went on in municipalities was worthy of attention. In other words, we still lacked more

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<sup>&</sup>lt;sup>2</sup> Table 1 in the Annex shows the evolution of healthcare expenditures between 1995 and 2006. In 1995, public expenditures reached US\$17 billion, going to US\$28 billion in 2006 (figures restated to reflect the worth of a dollar in 2000). In 2006, total expenditures were equal to 7.5% of the GDP (US\$ 58.5 billion), of which 48% were public expenditures and 51% were private expenditures.

information about how these new resources and programs were being distributed inside the municipalities, a relevant issue, especially in mid-sized and large cities. Thus, the effects of these new policies were usually analyzed from an inter-regional and/or inter-municipal perspective, but the literature still lacked analyses that showed how these factors were affecting access to healthcare from an intra-municipal perspective.

Therefore, at that time and following CEM's research agenda, which called attention to the importance of inequality within the metropolitan region, we tried to take a step further in analyzing the evolution of the supply and consumption of public healthcare services at an intra-municipal level. Were the differences decreasing between the poor and rich areas of São Paulo in terms of access to public health services?

In addition, we were interested in evaluating and analytically integrating the drivers of change mentioned above, which had been systematically highlighted in the literature to be capable of contributing to mitigating the inequalities created by the previous healthcare system. They were: (i) greater autonomy of the city halls in managing decentralized federal funds, and (iii) public participation.

This article presents the results of this work and is organized into 5 sections in addition to this introduction. In the following section we briefly outline the methodology used to analyze both the evolution of the intra-municipal distributive profile of public health services and the performance of the local health councils. In the third section, information is presented on the evolution of the SUS infrastructure within the Municipality of Sao Paulo, (analyzing the distribution of the Basic Healthcare Units (UBSs), Clinical Medical Assistance Units (AMA)<sup>3</sup>, and hospitals) as well as the supply and consumption of basic consultations and hospital admissions. These data point to the fact that the number of health facilities and the consumption of services are increasing at a faster rate in the poorest areas. They also point to the fact that there has been a reduction in the disparity between the consumption of services

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<sup>&</sup>lt;sup>3</sup> Created in 2005 by the Municipal Secretariat of Health, the Clinical Medical Assistance Units (AMAs) are units for non-appointment, low to medium complexity services in the medical clinic, pediatrics, general surgery, and gynecology areas.

across the areas with the best and worst indices of income, education and health, while inequalities slightly grew in the distribution of basic consultations within the poorest areas. In the fourth section we discuss these results. Finally, in the fifth section we summarize the contribution of this research to the discussion about the role of decentralization and social participation in increasing equality in access to healthcare.

### Research methodology

To analyze the intra-municipal distribution of health services we ranked the city's 31 submunicipalities according to their Municipal Human Development Index (MHDI). For each sub municipality, the percentages of SUS users were calculated<sup>4</sup> and thereafter the consumption rates for primary appointments and for hospital admissions in the 31 submunicipalities. In order to facilitate the description the submunicipalities were grouped into four quartiles according to the same index (MHDI).

Map 1 shows the Municipal Human Development Index (MHDI) figure calculated for each of these sub-municipalities. As shown by the information, central districts had better human development indicators. Map 2 illustrates the health conditions and needs of the population:<sup>5</sup> the city outskirts present the worst epidemiologic indicators and greatest need.

<sup>&</sup>lt;sup>4</sup> The calculation of the SUS population is a statistical inference based on data from the National Household Sample Survey – PNAD 2003 and the 2000 Demographic Census, both from the IBGE – Brazilian Institute of Geography and Statistics. This is done by obtaining, from the PNAD, the percentage of the population that does not have health insurance (SUS users) by family income stratum in the Metropolitan Region of Sao Paulo; using this information, the SUS population of each sub-municipality is calculated using the product of this percentage and the distribution of family income in each of these locations according to the census.

<sup>&</sup>lt;sup>5</sup> The Healthcare Index is a synthetic indicator calculated using: the infant mortality coefficient, the tuberculosis index coefficient, early mortality from non-transmissible chronic diseases, and the coefficient of mortality from external causes.

Casa Verde São Miguel Cidade **Tiradentes** Vila Prudente / Sapopemba M'Boi MHDI 0.600 to 0.799 Health Index 2001 -0.800 to 0.840 Rank 0.841 to 0.918 1º to 8º 0.919 to 0.941 9º to 16º

Map 1 – São Paulo's Sub-municipalities by Map 2 – São Paulo's Sub-municipalities by Municipal Human Development Index, 2000 rank in Heatlh Index, 2001

Source: Atlas do Trabalho e Desenvolvimento Source: SMS – Ceinfo

0.942 to 1.0

**Parelheiros** 

30

(SMT). Map: CEM/Cebrap

kilometers

Map 3 shows the distribution of the population that uses the SUS. As we can see, this population is concentrated in the outskirts of the city. These maps show that sub-municipalities with the worst socio-economic and health indicators have the highest concentration of SUS users. It is important to clarify that the SUS-user is a citizen without a private health insurance, who uses the public health system. According to Neri and Soares (2002), in Brazil, among the poorest 10% of the population, around 2.8% have some kind of private health plan, a figure that reaches

<sup>6</sup> As can be seen in Table 2 in the Appendix, areas in the outskirts of the cities are not only where most of the SUS users are located, but also where there is greater population growth. Between 2003 and 2008, the population of all of the 17 sub-municipalities with the lowest MHDI, except for Vila Prudente/Sapopemba, grew faster than the municipal average of 2.9% (See Table 1). In some regions, like Parelheiros, Perus and Capela do Socorro, the number of SUS users increased by more than 10% in only 5 years, considerably increasing the demand for healthcare equipment and services in these

regions.

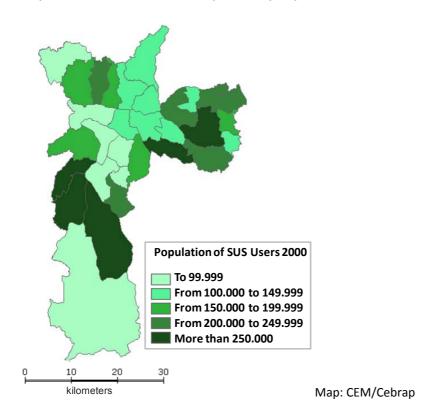
17º to 24º 25º to 31º

30

20

<sup>&</sup>lt;sup>7</sup> The proportion of SUS users is negatively correlated with the sub-municipalities MHDI. Pearson's correlation: 0.967\*\*.

74% for the wealthiest 10%. In São Paulo's case 48% of the total population exclusively uses SUS services.



Map 3 – São Paulo's Sub-municipalities by Population of SUS users, 2000

In the next section we present data about the distribution of health facilities, basic appointments and hospital admissions in the city's 31 sub municipalities. Since there is no information to allow identification of the beneficiary of a given appointment, we have assumed a plausible premise that this kind of service tends to be produced in a decentralized fashion and consumed locally. From the absolute number, provided by the Health Secretariat, we built a rate of appointments, which is the ratio between these appointments and the population that uses the SUS in each sub-municipality. In the case of hospital admissions it is possible to identify the address of those admitted, thereby confirming that the procedures were consumed by the residents of a particular sub-municipality. From the absolute number, provided by the Health Secretariat, we built a rate of hospitalizations, which is the ratio between these

authorizations and the population that uses the SUS in each sub-municipality (per 10,000 users).

To research the local health councils (LHC) we selected six of them located in poor areas of the city. We initially listed eleven possible *sub-prefeituras* with a Municipal Human Development Index of between 0.74 and 0.83. From these, we selected six. Three of these - São Miguel, Cidade Tiradentes, and M'Boi Mirim - had a strong history of social mobilization over health demands, whilst in the other three - Casa Verde, Vila Prudente/Sapopemba, and Parelheiros - there had been fewer of these mobilizations<sup>9</sup>. The LHC in each of these sub-municipalities has a different associational trajectory. Map 1 show the six selected areas. To analyze the councils' performance we developed a model that differentiates between inclusion, connections and participation. We also followed the debates that took place in these LHCs. This analysis allowed us to present a set of indicators that summarizes and made possible the comparison of the performance of the LHCs.

We now turn to the description of the distributive tendencies of the consumption of public health services in the Municipality of São Paulo between 2000 and 2008.

# Changes in the distribution of healthcare services and equipment in Sao Paulo, 2001-2008

In 2000, when a mayor from the Worker's Party (PT) was elected, there were a number of changes made to municipal health policies, starting with the creation of 41 health districts. <sup>10</sup> These districts were later incorporated into the 31 sub-municipalities that currently make up the municipality. Today, each sub-municipality has a Technical Health Supervision Unit (each unit is under one of the five regional coordinators' offices at

<sup>&</sup>lt;sup>8</sup> The MHDI varies from 0.74 to 0.95 across all the subprefeituras of São Paulo.

<sup>&</sup>lt;sup>9</sup> This classification, based on secondary research, was checked in interviews with Carlos Neder, excouncillor, state deputy, and a specialist on social health movements in the city of São Paulo, and Nabil Bonduki, an ex-municipal councillor and a research specialist on social movements in São Paulo.

 $<sup>^{10}</sup>$  These districts had populations ranging from 180,908 to 418,440 inhabitants.

the Municipal Secretariat of Health<sup>11</sup>) and a Local Health Council made up of users (50%), health managers (25%), and service providers (25%), whose function is to contribute to defining and monitoring health policies in the region. These local health councils are similar to the municipal ones, but without decision-making powers since they lack a Constitutional mandate.

Based on this context and analyzing available data on the supply and consumption of public healthcare services in the city of Sao Paulo for 2001, Coelho and Pedroso (2002) described a situation where despite the fact that the SUS population was concentrated in the outskirts, equipment and services were concentrated in the central and oldest areas of the city of Sao Paulo.<sup>12</sup> This meant that the populations who lived in areas with better socioeconomic indicators were privileged compared to populations living in the outskirts of the city. In this sense, it is important to note that the differences in distribution measured there and in the present work are between the poor that live in different areas of the city, rather than between poor and non-poor as such.

In a more recent study Coelho e Silva (2007) pointed out that whilst the distributive profile remained inequitable, with the highest levels of use to be found in the richest areas with the best epidemiological indicators in the municipality of São Paulo, it should be noted that there was some evidence, feeble at that point, that this pattern was changing. A higher increase in the consumption in the poorest submunicipalities and a narrowing of the consumption gap across sub-municipalities with the highest and lowest MHDIs, could result in the reversal of the distributive trend observed. As it will be shown bellow, this tendency seem to be confirmed by the more recent data analyzed in this paper.

### **Equipment supply**

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<sup>&</sup>lt;sup>11</sup> The five regional Coordinators' offices are: Center-west, East, North, Southeast and South.

<sup>&</sup>lt;sup>12</sup> For more details see maps 1,2 and 3 in section 2

As noted above, this bias in favor of central areas was partially reverted in more recent years and this was made possible at least in terms through heavy investment in infrastructure. This investment was made mainly by expanding or opening Basic Healthcare Units (UBSs) and AMAs (OHU) in the regions on the outskirts of the city. Table 1 shows the increase in the amount of available equipment.

Table 1 – Public Health Equipment, São Paulo, 2000 - 2008

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Hospitals	51	50	53	51	51	52	53	55	55
BHU (UBS) <sup>13</sup>	135	234	244	250	382	392	407	407	416
OHU (AMA)	-	-	-	-	-	10	33	52	116

Source: Municipal Secretariat for Planning. Created by: CEM/Cebrap

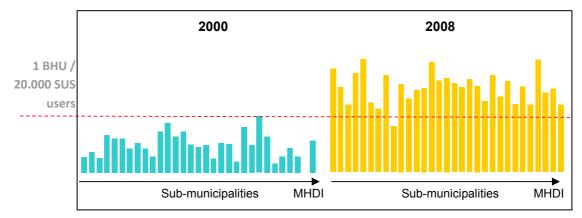
As can be seen in Table 1, the number of public hospitals – municipal, state and federal – went from 51 to 55 in the period. Along with this expansion there was a shift in the distribution of hospital beds: in 2000, the 9 sub-municipalities with the smallest Municipal Human Development Index supplied 6.6% of the public hospital beds in the municipality, while 8 years later this percentage had increased to 16.0%.

Charts 1 and 2 show the evolution in the distribution of BHU (UBSs) and OHU (AMAs) in the municipality.

<sup>13</sup> Some of the UBSs that started operating were previously healthcare centers or medical service centers.

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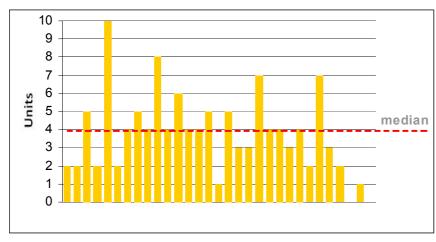
Chart 1. Basic Health Unit by 20.000 SUS users, São Paulo, 31 Sub-municipalities, 2000 and 2008



Source: Municipal Secretariat for Planning. Created by: CEM/Cebrap

Chart 1 shows that the number of BHU (UBSs) not only tripled in this period, but that there was also considerable progress in the distribution of this equipment to areas in the outskirts of the city. Chart 2 shows the expansion of OHU (AMAs), which went from 10 units in 2005 to 116 in 2008, thus reflecting the priority that the party in charge of the municipal government gave to increasing low and medium complexity emergency care services.

Chart 2. Outpatient Health Unit, São Paulo, 31 Sub-municipalities, 2008



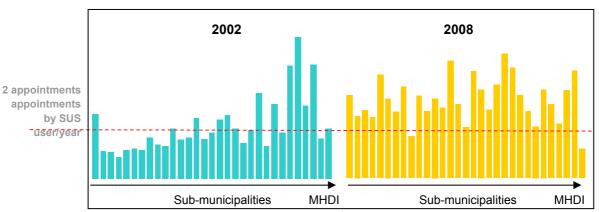
Source: Municipal Secretariat for Planning. Created by: CEM/Cebrap

It is worth noting that the first AMAs opened in 2005, with most of them being placed in the same physical spaces as the existing UBSs, therefore making it unnecessary to build new units.

### Supply of services

An analysis of the distribution of services provided with this equipment also shows encouraging data. Chart 3 shows the distribution of basic appointments among the 31 sub-municipalities.

Chart 3. Primary appointments per SUS user/year, São Paulo, 31 Sub-municipalities, 2002 and 2008



Source: Municipal Secretariat of Health. Created by: CEM/Cebrap

The number of primary appointments increased by 68.1% between 2002 and 2008 and the average rate of basic appointments per SUS user per year went from 2.02 to 3.39. In 2002, 17 sub-municipalities (9 out of the 10 with the worst Municipal Human Development Indexes) had lower rates to that recommended by the World Health Organization (WHO), which is 2 appointments per person/year; in 2008, only 2 had inferior rates. Rates fell for 6 of the 8 sub-municipalities with the greatest Municipal Human Development Indexes, suggesting that in some of these regions the rate was artificially high; or rather, part of the appointments made at these units were for users from other areas. In other words, this data may indicate that SUS patients sought care in these sub-municipalities due to a lack of supply of such services in the regions where they live.

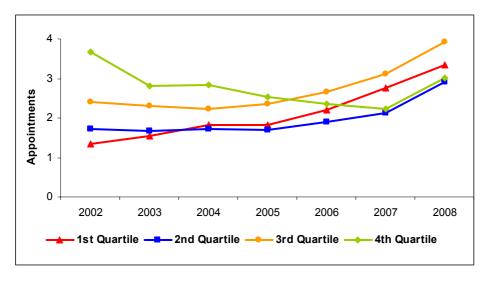
Table 2 shows these aggregate appointments by sub-municipality group. In this table, the city's 31 sub-municipalities were grouped into four quartiles according to their ranking in the Municipal Human Development Index (MHDI).

Table 2 – Primary appointments per SUS user/year, São Paulo, Quartiles, 2002 and 2008

		Number of App	ointments	Number of App	Relative Increase	
		2002		2008		2002-2008
Quartiles	MHDI	Total	Per SUS user		Per SUS user	
1st quartile	0.77	1,880,929	1.33	5,148,808	3.35	173.7
2nd quartile	0.81	3,160,668	1.73	5,648,032	2.91	78.7
3rd quartile	0.85	3,122,877	2.41	5,126,034	3.94	64.1
4th quartile	0.93	2,487,788	3.68	1,982,058	3.02	-20.3
São Paulo	0.84	10,652,262	2.09	17,904,932	3.39	68.1

Source: Municipal Secretariat of Health. Created by: CEM/Cebrap

Chart 4 - Primary appointments per SUS user/year, São Paulo, Quartiles, 2002 to 2008

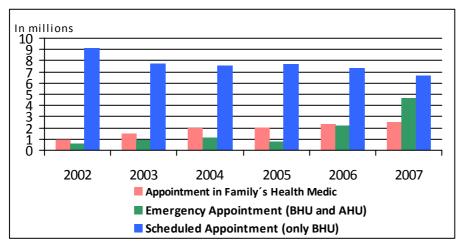


Source: Municipal Secretariat of Health. Created by: CEM/Cebrap

Chart 4 and Table 2 show a significant reduction in disparities in access to appointments with the standard deviation decreasing from 1.19 to 0.94. Comparing the distribution within the quartiles, the standard deviation in the fourth quartile (the wealthiest) dropped from 1.70 in 2002 to 1.14 in 2008, and within the first quartile (poorest) it increased from 0.58 to 0.64. If we divide the city into 2 groups according to their MHDI, the standard deviation in the distribution of basic appointments among the poorer sub-municipalities rose from 0.52 to 0.79 and in the richer half it dropped from 1.36 to 1.08.

It is worth noting that there is a huge jump in the number of appointments in 2006, at the same time that the OHU (AMAs) were implemented. Even though it is not possible to precisely identify the impact of these units in the network because most of them were implemented in existing BHU (UBSs) and the table of procedures does not have specific codes to denote their existence, it is possible to divide appointments into two types: emergency appointments or services and scheduled appointments. The former is available at OHU (AMAs) as well as BHU (UBSs), whereas scheduled appointments can only be made at the UBSs. Table 3 shows that, while there was a reduction in the number of scheduled appointments made in recent years, emergency appointments/services increased by 1.186%, which shows us the impact the OHU (AMAs) had on the municipal public healthcare system.

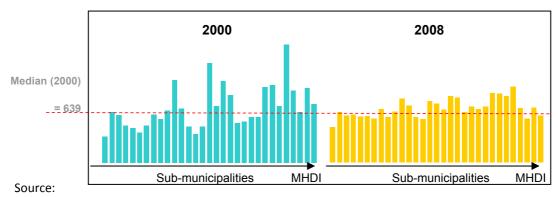
Table 3 – Primary appointments by type, São Paulo, 2002 to 2007



Source: Municipal Secretariat of Health. Created by: CEM/Cebrap

Finally, it is worth mentioning the indicators related to output by hospitals. Chart 5 shows the distribution of Hospital Admissions. <sup>14</sup>

Chart 5 – Hospital Admission Rate, São Paulo, 31 Sub-municipalities, 2000 and 2008



Datasus – Ministry of Health. Created by: CEM/Cebrap

<sup>14</sup> The Authorization for Hospitalization (AIH) is the means through which healthcare service providers in Brazil are reimbursed. Each of the procedures carried out at a center are reimbursed according to a payment chart. The number of AIHs has been used to oversee the distribution of the SUS's supply of hospital beds. AIH records indicate an address for those who used the SUS service, which allows for mapping of the consumption of hospitalizations in the 31 sub-municipalities. From the absolute number, provided by the Health Secretariat, we built a rate of hospitalizations, which is the ratio between these authorizations and the population that uses the SUS (per 10,000 users).

In 2000, 6 sub-municipalities had a rate of up to 499 hospitalizations per 10,000 users and 7 had a rate greater than 1,000. In 2008, only 1 sub-municipality had a rate of under 499 (Parelheiros) and only 1 was over 1,000 (Sé). Table 4 shows the authorization rates for the municipal quartiles.

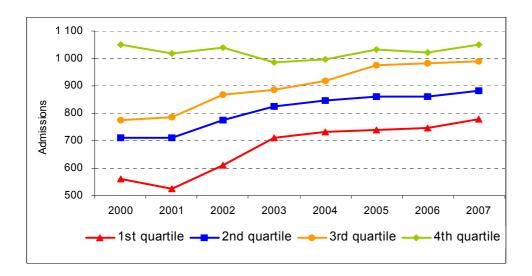
Table 4 – Hospital Admission Rate, São Paulo, Quartiles, 2000 and 2008

			Admissions		Admissions	Relative Increase
			2000		2008	2002-2008
Quartiles	MHDI	Total	Per 10,000 SUS users	Total	Per 10,000 SUS users	
1st quartile	0.77	76,752	561	106,565	642	14.4
2nd quartile	0.81	126,613	710	153,373	731	3.0
3rd quartile	0.85	100,064	774	115,507	802	3.6
4th quartile	0.93	71,941	1,052	62,375	851	-19.1
São Paulo	0.84	375,370	745	437,820	744 <sup>15</sup>	-0.1

Source: Datasus – Ministry of Health. Created by: CEM/Cebrap

 $^{15}$ In 2008, the rate of authorizations in the network covering health insurance was 1,318 hospitalizations per 10,000 people

Chart 6 - Ratio of Consumption of Hospital Admissions per year per quartile per 10 thousand SUS users, São Paulo, 2002 to 2007



Charts 5, 6 and Table 4 show a significant reduction in disparities in hospital admissions. The standard deviation in the distribution of Hospital Admissions dropped from 297 to 131. In a comparison of the distribution among the quartiles, the standard deviation in the first quartile (poorest) went from 120 in 2000 to 73 in 2008, and within the 4th quartile (wealthiest) it fell from 309 to 163. If we divide the city into 2 groups according to MHDI, the standard deviation in the distribution of Authorizations for Hospitalization among the poorest sub-municipalities decreased from 270 to 103 and in the richer half it went from 281 to 128.

In short, the data collected here clearly shows that the distribution of public healthcare services in Sao Paulo became more equitable. There was significant expansion in the supply as well in the consumption of services in the regions that present the worst socio-economic and health indicators. There are more healthcare units, clinics and hospitals and, as a result, more services are being offered to the poor populations living in these regions. An analysis of the distribution of these resources also showed that we now have a more equitable distribution pattern of public health services between locations with a reduction in the geographic inequalities hindering access to the public health system. What is not in line with this scenario are the increased differences (reflected in the rise in standard deviation) in the rates of basic

appointments recorded in the sub-municipalities that have the worst socio-economic and health indicators.

### Analyzing the results

In this section, we will discuss aspects related to the health policies implemented in the 1990s and 2000s with the aim of identifying factors that have contributed to the development of the distributive pattern described in the previous section. This pattern shows a reduction in inequalities in the supply of services among areas that have the best and the worst socio-economic and health indicators, as well as a slight increase in inequalities in distribution in areas with the worst indicators. We will explore two assumptions that underscore different dynamics that, according to our argument, have been acting in tandem.

The first explores the inductive power of federal policies. Arretche 2004, Médici 2001 and others highlighted the extent to which federal programs and rules of fiscal transfers play an important strategic induction role in promoting greater balance between the offer of basic and complex services while also providing greater access to resources for the poorest municipalities. Following these authors our assumption suggest that municipal officials played a proactive role in coordinating the municipal system and used criteria for municipal allocation inspired by federal criteria, which would have contributed to making the supply more equal.

The second assumption explores the process of intra-municipal decentralization of healthcare policies. This decentralization was implemented through the creation, at the sub-municipality level, of the Technical Health Supervision Units and of the Local Health Councils (Sobrinho and Capucci 2003; Teixeira, Kayano and Tatagiba 2007; Coelho et al. 2010). The assumption is that, in areas of the city where there is a stronger history of social mobilization (which is usually connected to the healthcare movement<sup>16</sup> in areas located in the outskirts of the city), successful alliances were

 $<sup>^{16}</sup>$  Since the early 1980s, this movement had defended profound health policy reforms and was a key player in the creation of the SUS.

formed between the Local Health Councils (LHC) and the Technical Supervision Units, which would have ensured the power to pressure the Municipal Secretariat and would have contributed to increasing the amount of resources allocated for these areas.

Next we discuss these two assumptions.

### Discussing the first assumption

Since 1998, federal fiscal transfers for basic care have been automatic and calculated in per capita terms. The automatic transfers, for their part, afforded a greater degree of autonomy to the municipalities and promoted the decentralization of health resources. This system enabled the implementation of various federal programs by the municipal governments, such as: the Family Health Program and the Outreach Agents' Program. As noted in the previous section, the results of these programs can be clearly seen in the municipality of São Paulo, with an increase in the number of basic health facilities and primary appointments.

The creation within the SUS of two levels of management, the full management of basic care and the full management of the municipal system, has also contributed to reinforcing the role of the municipality in managing the healthcare system. In 2003, when the municipality of Sao Paulo adopted full management, it began to receive all of the resources earmarked for basic care and it had the autonomy to use them. It also gained autonomy over the set of medium and high complexity hospital procedures. With this, the amount of resources available to the Municipal Secretariat as well as its autonomy in managing these resources increased.<sup>17</sup>

In order to understand how these resources were allocated, we then analyzed the municipal strategy of implementing the Basic Healthcare Units (UBSs) in the period ranging from 2000 to 2008. It is worth remembering that the UBSs are the most important instruments in basic care, because they are the basis for the organization of the Family Healthcare Program (PSF) and the Community Agents Program (PACS)

<sup>&</sup>lt;sup>17</sup> In the case of resources distributed from fund (national) to fund (municipal), transfers to municipalities grew from 25.15% of the total funds made available by the Ministry of Health in 1997 to 66.9% in 2001 (Melamed and Costa 2003).

teams, and theoretically are the door into the healthcare system. Chart 6 shows a strong link between the UBSs' distribution and the size of the population of SUS users in the sub-municipalities, which suggests that a *per capita* criterion was used to calculate the units to be implemented or expanded.<sup>18, 19</sup>

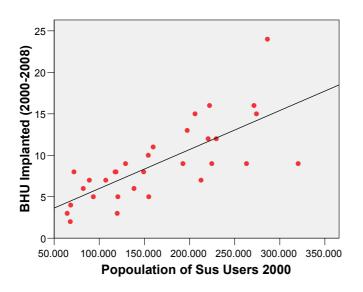


Chart 6 – BHUs implanted between 2000 and 2008, São Paulo, 31 Sub-municipalities

Source: Municipal Secretariat for Planning; IBGE (2000 Census). Created by: CEM/Cebrap

With respect to the hospital system, it should be noted that with the "full management" modality greater authority was given to the municipal authorities over the management and administration of municipal public hospitals as they gained the prerogative to hire, audit, determine production caps, and pay the providers of private and public hospitals. This increased autonomy and especially its ability to determine maximum caps for the payment of procedures executed and to grant and revoke accreditation of hospitals has contributed to enforcing their authority in adjusting the distribution of hospital admissions (see Table 4 and Chart 5).

The analysis of the UBSs' distribution as well as the systematics of determining caps for payment of the Hospital Admissions and granting and revoking accreditation

<sup>&</sup>lt;sup>18</sup> The Pearson correlation is 0.734

 $<sup>^{19}</sup>$  This ratio has remained steady, albeit with less strength when the calculation is done for the total population. See Chart 1 in the Attachment

for hospitals suggests that municipal managers, according to the rationale set forth at the federal level, used technical criteria to make sure that the new resources were distributed in a manner that would serve the population living in the municipality in a more equitable way. In this case, however, it seem reasonable to guess that, unlike federal managers, who use *per capita* criterion, municipal managers tried to prioritize those areas where the population of SUS users was greater, which are the poorest areas and those with worse health indicators. In this sense, the Municipal Secretariat of Health assumed a strong role in organizing the process and in defining the norms for the intra-municipal transfer of resources.

### Discussing the second assumption

An element of the decentralization process that should be highlighted is the creation of Technical Health Supervision Units and Local Health Councils in the submunicipalities. The creation of these supervisions and councils followed the agenda of the Brazilian health reform program, which saw decentralization as part of a wider strategy of democratization and the incorporation of new social actors in the management of the health system (Levcovtiz, et al., 2001). In this way, in each submunicipality, a local health council as well as a large number of unit health councils has been created. They were set up over two years, involving the mobilization of over 4,000 people to participate in at least one monthly meeting (Sobrinho and Capucci 2003).

The local health council of the sub-municipality consists of 24 effective and 24 substitute councilors. These councils were expected to make more democratic the discussions over what to fund with public money and for whom, as well as discussing the quality and adequacy of the services being provided (Coelho et al., 2005). The councilors that represent civil society self-identified themselves as representatives of: popular health movements; health units; religious associations; neighborhood associations; Unions; civil rights groups; participatory fora; homelessness movements; landless peasants movements; community or philanthropic groups; disabled persons

associations; or as non-affiliated representatives (Coelho, 2006). From this process emerged a network of councils distributed throughout the municipality, covering both central and peripheral areas, as well as rich and poor ones.

In this subsection we will explore the impact of these processes on the distribution of health services. Unlike in the previous subsection's discussion, in this case we do not have data that allows for a more comprehensive discussion of these impacts and we will use more specific information collected by the CEM/CEBRAP team, as described in section 2. Thus it is worthwhile to proceed with caution bearing in mind that the evidence presented below is more indicative than conclusive in nature. The analysis developed in this section builds upon previous research carried out between 2006 and 2008 on the dynamics of six Local Health Councils (LHCs) located in poor areas of the city. Three of these - São Miguel, Cidade Tiradentes, and M'Boi Mirim- had a strong history of social mobilization over health demands, while in the other three - Casa Verde, Vila Prudente/Sapopemba, and Parelheiros - there had been fewer of these mobilizations.<sup>20</sup>

In this context, in the sub-municipalities with a stronger history of mobilization, the LHC discussions were marked by more conflict and confrontation, but had better outcomes in the variables related to monitoring healthcare services and innovative proposals. The organizations and the councils for these areas also present a greater number of connections with socio-political and institutional actors and have links to segments of bureaucracy, service providers, politicians and the civil society. We also noted that this dynamic has contributed to promoting greater integration between the councils and the Technical Health Supervision Units for their respective areas (Coelho et al. 2010). In a situation of heated disputes over resources between submunicipalities, this integration with councils has been welcomed by supervisors of the Technical Units. After all, those with the support and endorsement of civil society will be in a better position to negotiate their demands to the Municipal Secretariat of Health.

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<sup>&</sup>lt;sup>20</sup> This classification, based on secondary research, was checked in interviews with Carlos Neder, an excouncilor, state deputy, and specialist on social health movements in the city of São Paulo, and with Nabil Bonduki, an ex-municipal councilor and a research specialist on social movements in São Paulo.

The gains of this strategy are reflected in the increased ability to raise funds as shown by the three sub-municipalities with more active councils. So, for example, the only two municipal hospitals opened in the period were built in Cidade Tiradentes and M'Boi Mirim. It is true that these areas did not have any hospitals, but it is also true that six other sub-municipalities in the outskirts that presented low MDHIs were in the same situation and did not receive any public hospital in the period. Another example is given by the number of OHU (AMAs) operating in these sub-municipalities. There were 16 units in the three sub-municipalities that have the most active councils *vis-à-vis* 10 in the areas where the councils are less active. In this case, the second group should have had 15 units, if the distribution had only followed population distribution criteria.

As was previously mentioned, these results are not robust given the small number of cases analyzed, but they suggest the possible distributive impacts of participatory dynamics that are taking place in the sub-municipalities of the regions in the outskirts of Sao Paulo.

In short, in this section we have explored two dynamics that we believe allow for an explanation of many of the distributive results described in the previous section. One of these dynamics describes municipal managers that, inspired by federal managers, have taken on a strong role in organizing the process of intra-municipal distribution of resources, adopting rules for their allocation based on the size of the SUS population living in the sub-municipalities. The other describes successful dynamics linking social actors and managers that are present in the sub-municipalities and involved in the dispute for a greater share of these resources.

### **Final Comments**

In this study we discussed the impacts of decentralization and social participation in the intra-municipal distribution of healthcare services in the Municipality of Sao Paulo. Even though there is heated debate over the distributive

consequences of the programs and funding rules adopted from the 1990s on by the federal government, as well as about the influence of social participation in health policies, the truth is that we still know very little about how resources are allocated within large and mid-sized municipalities, as well as about how participatory processes may be able to bring about distributive changes.

In this study we discussed these two issues, describing changes that occurred within the profile of the distribution of healthcare equipment and services in the city of Sao Paulo between 2000 and 2008, and tried to identify the mechanisms associated to federal policies and to participation that may be contributing to the definition of this profile.

As was described in previous sections, a significant increase has been noted in the amount of financial resources made available to healthcare along with a concomitant increase in the physical structure, especially regarding BHU (UBSs) and OHU (AMAs), as well as in the rate of basic appointments and hospital admissions offered by the SUS in the municipality. A reduction was also found in inequalities in the supply of services among areas that have the best and the worst socio-economic and health indicators, as well as a slight increase in inequalities in distribution of basic appointments in areas with the worst indicators.

We suggest that these results can be explained by two dynamics put in motion by the process of decentralization and democratization of healthcare policies. In one of them, the municipal manager, in line with federal policies, has taken on a strong role in organizing the process of intra-municipal distribution of resources by adopting rules for resource allocation based on the size of the population of SUS users living in the sub-municipalities. In the other, the municipal manager has met the demands made by sub-municipality managers that, along with healthcare council representatives, fight for priority allocation, especially of new resources. We have furthermore highlighted that these results have changed according to the location and dynamics of the councils, as we only noticed this successful alliance between managers and more active councilors in sub-municipalities whit a stronger history of social mobilization.

These dynamics paint a rich picture of how top down and button up dynamics are interacting to shape the municipal health policy. In doing so, they call for greater attention to be paid to the crucial role that institutional rules together with the politics of public participation are playing in building the SUS.

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### **Annex**

TABLE 1 – Health Expenditure by Sector, Brazil, 1995 a 2006

		Heal (cons	th Expendit tant US\$ 20	ture 100) <sup>1</sup>	Health Expenditure (in %)			
Year	GDP (constant US\$ 2000) <sup>1</sup>	Total	Public	Private	% of GDP	Public (% of total)	Private (% of total)	
1995	583.2	39.1	16.8	22.3	6.7	43.0	57.0	
1996	594.3	40.4	16.4	24.0	6.8	40.5	59.5	
1997	617.9	42.0	18.1	23.9	6.8	43.0	57.0	
1998	615.9	41.3	17.6	23.7	6.7	42.6	57.4	
1999	619.2	44.0	18.8	25.2	7.1	42.7	57.3	
2000	644.5	46.4	18.6	27.8	7.2	40.0	60.0	
2001	654.3	49.7	20.1	29.6	7.6	40.5	59.5	
2002	671.7	51.7	21.7	30.1	7.7	41.9	58.1	
2003	677.3	50.8	21.0	29.8	7.5	41.3	58.7	
2004	716.4	55.2	23.9	31.3	7.7	43.3	56.7	
2005	737.9	58.3	25.7	32.6	7.9	44.1	55.9	
2006	779.4	58.5	28.0	30.5	7.5	47.9	52.1	

(1) In billions

Sources: Who, World Bank. Chart: Cebrap/CEM.

Table 2 – Total Population and SUS users, 2003 and 2008

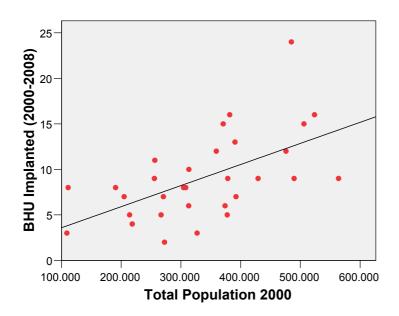
			2003		200	8	Relative
	MHDI	% SUS users	Population	SUS Users	Population	SUS Users	Increase (%)
MSP	0.84	48.3	10 629 245	5 131 194	10 940 311	5 281 874	2.9
Parelheiros	0.74	64.7	123 891	80 115	146 812	94 938	18.5
Guaianases	0.76	62.3	269 263	167 771	289 214	180 202	7.4
Itaim Paulista	0.76	61.4	373 878	229 652	395 729	243 073	5.8
Cidade Tiradentes	0.77	61.6	199 533	122 999	214 397	132 162	7.4
M'Boi Mirim	0.77	59.0	506 759	299 200	540 741	319 263	6.7
Perus	0.77	59.0	118 758	70 092	133 300	78 675	12.2
São Miguel	0.78	59.4	389 500	231 271	407 721	242 090	4.7
São Mateus	0.78	58.2	398 727	232 140	425 948	247 988	6.8

Capela do Socorro	0.79	56.8	602 407	342 306	669 552	380 460	11.1
Cidade Ademar	0.79	55.6	381 941	212 327	399 970	222 350	4.7
Freguesia/Brasilândia	0.80	54.2	401 326	217 688	413 908	224 513	3.1
Itaquera	0.80	53.8	502 620	270 185	521 760	280 474	3.8
Campo Limpo	0.81	54.2	532 854	288 729	574 916	311 521	7.9
Ermelino Matarazzo	0.82	52.3	206 691	108 089	209 276	109 441	1.3
Vila Prudente	0.82	51.8	525 718	272 544	527 949	273 701	0.4
Jaçanã/Tremembé	0.82	50.5	263 523	133 076	274 746	138 743	4.3
Pirituba	0.83	50.6	409 650	207 091	439 318	222 089	7.2
Casa Verde	0.83	49.2	313 777	154 498	313 795	154 507	0.0
Vila Maria	0.84	49.0	296 897	145 499	287 344	140 818	-3.2
Penha	0.85	48.3	475 283	229 350	473 242	228 365	-0.4
Jabaquara	0.86	43.6	213 049	92 932	212 406	92 652	-0.3
Ipiranga	0.86	44.9	428 440	192 345	426 378	191 419	-0.5
Aricanduva	0.87	45.2	263 064	118 875	256 446	115 884	-2.5
Butantã	0.89	41.0	379 968	155 827	382 420	156 833	0.6
Santana/Tucuruvi	0.90	36.6	316 238	115 856	306 656	112 346	-3.0
Mooca	0.90	38.5	304 618	117 127	298 453	114 756	-2.0
Sé	0.93	37.0	364 874	135 111	351 192	130 045	-3.7
Lapa	0.93	32.9	269 336	88 517	266 597	87 617	-1.0
Santo Amaro	0.94	31.3	219 440	68 584	219 743	68 679	0.1
Vila Mariana	0.95	26.3	308 143	80 954	299 264	78 621	-2.9
Pinheiros	0.96	24.9	269 079	66 934	261 118	64 954	-3.0

Note: Numbers in blue are for growth above the municipality average; those in red are below the average.

Sources: IBGE; Fundação Seade; Municipal Secretariat of Labor; Municipal Secretariat for Planning. Created by: CEM/Cebrap

Chart 1 – BHU implanted between 2000 and 2008, São Paulo, 31 Sub-municipalities (Total Population)



Source: Municipal Secretariat for Planning. Created by: CEM/Cebrap

Table 3 – SUS hospital beds, 2000 and 2008

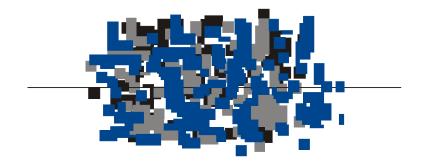
		2000 200		2008	
Territorial Units	MHDI	Public hosp. beds	Acumul. %.	Public hosp. beds	Acumul. %.
Municipality of Sao Paulo	0.84	14,882		13,956	
Parelheiros	0.74	-	0.0	-	0.0
Guaianases	0.76	226	1.5	305	2.2
Itaim Paulista	0.76	-	1.5	289	4.3
Cidade Tiradentes	0.77	-	1.5	228	5.9
M'Boi Mirim	0.77	316	3.6	524	9.6
Perus	0.77	-	3.6	-	9.6
São Miguel	0.78	196	5.0	189	11.0
São Mateus	0.78	146	5.9	262	12.9
Capela do Socorro	0.79	100	6.6	431	16.0
Cidade Ademar	0.79	-	6.6	-	16.0
Freguesia/Brasilândia	0.80	171	7.8	198	17.4
Itaquera	0.80	878	13.7	194	18.8

Campo Limpo	0.81	-	13.7	-	18.8
Ermelino Matarazzo	0.82	278	15.5	302	20.9
Vila Prudente/Sapopemba	0.82	89	16.1	448	24.1
Jaçanã/Tremembé	0.82	331	18.4	-	24.1
Pirituba	0.83	462	21.5	482	27.6
Casa Verde/Cachoeirinha	0.83	371	23.9	411	30.5
Vila Maria/Vila Guilherme	0.84	233	25.5	222	32.1
Penha	0.85	68	26.0	52	32.5
Jabaquara	0.86	217	27.4	400	35.4
Ipiranga	0.86	592	31.4	624	39.8
Aricanduva/Formosa	0.87	-	31.4	-	39.8
Butantã	0.89	540	35.0	465	43.2
Santana/Tucuruvi	0.90	867	40.9	690	48.1
Mooca	0.90	956	47.3	830	54.1
Sé	0.93	3 218	68.9	625	58.5
Lapa	0.93	-	68.9	130	59.5
Santo Amaro	0.94	200	70.3	515	63.2
Vila Mariana	0.95	1 869	82.8	2 299	79.6
Pinheiros	0.96	2 558	100.0	2 841	100.0

Source: Municipal Secretariat for Planning. Created by: CEM/Cebrap



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