

# Financial incentives for model change in primary health care in São Paulo municipalities

## Incentivos financeiros para mudança de modelo na atenção básica dos municípios paulistas

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## Abstract

This article aims to characterize financial transfers within the scope of the Primary Care Block to the municipalities of the state of São Paulo, in the period between 2011 and 2017, and its relationship with the health care model change in Primary Health Care (PHC). This is a descriptive and exploratory study, of quantitative nature and with a retrospective longitudinal section. Transfers that occurred within the scope of the Variable Primary Care Floor (Variable PCF) were analyzed, aggregated according to its link with the model change. Family Health Strategy (FHS) coverage, number of home visits, and the percentage of municipalities that adhered to the Program for Access and Quality Improvement in Primary Care (PMAQ) were also considered. The results indicate the relevance of the *Incentives for model change* in the financing of primary health care in the state of São Paulo, especially for small municipalities, suggesting the interest of these municipalities in implementing the proposed measures. However, there are obstacles to identifying changes in practices, thus the current health care model is not properly explained from the analyzed indicators. In conclusion, complementing the use of funding as a model change-inducing device with evaluative processes specifically aimed at consolidating comprehensive PHC is needed.

**Keywords:** Healthcare Financing; Primary Health Care; Health Management; Health Policy; Brazilian National Health System.

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## Resumo

Este artigo objetiva caracterizar as transferências financeiras no âmbito do Bloco da Atenção Básica para os municípios do estado de São Paulo, no período entre 2011 e 2017, e sua relação com a mudança de modelo de atenção na Atenção Primária à Saúde (APS). Trata-se de um estudo descritivo e exploratório, de natureza quantitativa e de corte longitudinal retrospectivo. Foram analisadas transferências ocorridas no âmbito do Piso da Atenção Básica Variável (PAB Variável), agregadas segundo vinculação com mudança de modelo. Também foram considerados cobertura de Estratégia Saúde da Família (ESF), número de visitas domiciliares e o percentual de municípios que aderiram ao Programa de Melhoria do Acesso e de Qualidade da AB (PMAQ). Os resultados indicam a relevância que os *Incentivos para mudança de modelo* assumiram no financiamento da atenção básica no estado de São Paulo, em especial para municípios de pequeno porte, sugerindo o interesse da gestão municipal em implementar as medidas propostas. Contudo, constatam-se obstáculos para a identificação de mudança das práticas, de forma que o modelo de atenção em vigência não fica devidamente explicitado, a partir dos indicadores analisados. Conclui-se a necessidade de complementar a utilização do financiamento como dispositivo indutor de mudança de modelo com processos avaliativos voltados, especificamente, para a consolidação da APS abrangente.

**Palavras-chave:** Financiamento da Saúde; Atenção Primária à Saúde; Gestão em Saúde; Política de Saúde; Sistema Único de Saúde.

## Introduction

The health care model refers to the form or mode of production in health services, in a given historical-social context, based on the synergy of multiple factors, including: technologies, values, practices, legal framework, management model and financial and material resources, with the aim of building discourses, projects and policies (Fertonani et al., 2015).

For Primary Care (PC), in a universal system such as Brazil's, the most appropriate care model is based on comprehensiveness, just like Giovannella and Mendonça (2012) name as comprehensive or complete Primary Health Care (PHC), given its greatest potential to impact the health situation, people's autonomy and the social determinants of the health-disease process. This model is characterized by the attributes of first contact, longitudinality, scope or completeness, care coordination, community orientation, centrality in the family and cultural competence, similarly to what Starfield (2002) proposes.

There are disputes around the concepts that underlie comprehensive PHC, such as health promotion and the social determination of the health-disease process, which would have been emptied of their political content that transforms the social reality as they have been incorporated into the national health policy since the 1980s (Mendes; Carnut; Guerra, 2018). Despite the importance of this debate, it is possible to state that a certain notion of comprehensive PHC is consolidated from the 2011 National Primary Care Policy (PNAB) (Brasil, 2011).

The PNAB 2011 has, in the Family Health Strategy (FHS), the priority model for implementing these comprehensive PHC premises, as it proposes proximity to the territory, actions in the community, intersectorality, interdisciplinarity, longitudinality, bond, co-responsibility and articulation between surveillance and health promotion actions, with disease prevention and treatment. To this end, it provides for the participation of Community Health Agents (CHA) and professionals from the Family Health Support Center (FHSC), working in

an integrated manner with intersectoral programs aimed at comprehensive care, such as Health at School, Health Academy and Street Office teams (Brasil, 2012b). All these programs, as well as the FHS and FHSC teams, receive funding from the federal government, but their execution and monitoring are the responsibility of municipal management.

Federal resource transfers have been used as one of the induction strategies for public health policies. Several authors understand that this aspect of financing the Brazilian National Health System (SUS), which is not limited to PC, tends to weaken the autonomy of municipalities in the design of policies based on local health needs, going against the principle of decentralization (Mendes; Carnut; Guerra, 2018; Piola, 2017; Duarte; Mendes; Louvison, 2018). Even though there is no consensus among authors in the Public Health field regarding the use of this policy-inducing mechanism, it is necessary to assume its existence and wide use. Therefore, it should be noted that this type of strategy needs to be complemented with constant monitoring and evaluation of these investments. In the case of FHS, it would be worth highlighting the monitoring not only of the health indicators resulting from it, but also the care model that guides the practices that have promoted such results.

The Family Health Strategy is widely recognized as guiding the organization of SUS in the national territory, obtaining good results in health indicators referring mainly to maternal and child mortality and reduction of hospitalizations for causes sensitive to PC among patients with chronic diseases (Morosini; Fonseca; Baptista, 2020; IPEA, 2019; Macinko; Mendonça, 2018; Pinto; Giovanella, 2018). However, studies have already found that, often, the model of care that guides practices continues to be the biomedical one (Fertonani et al., 2015). These studies suggest that PC continues to transit between the FHS model and the hegemonic care model, which reiterates the importance of specific monitoring in this regard, aiming at strengthening the comprehensive PHC and a more complete model (Mendes-Gonçalves, 2017; Paim, 2012).

In addition to the challenging context regarding the evaluation of practices and the care model underlying them, the need to investigate investments for changing the model in Primary Care, in the sense of comprehensive PHC, is justified by the uncertainties about the possible impacts of the changes promoted upon approval of the 2017 PNAB (Brasil, 2017) and the new funding proposed by the Previne Brasil Program in 2019. These measures have been seen as retrogressions to the FHS model and, therefore, to the comprehensive PHC, we would therefore need to have adequate resources for monitoring related to this care model (Morosini; Fonseca; Baptista, 2020; Giovanella; Franco; Almeida, 2020).

In evaluating the care model, it is important to understand the work process and the practices resulting from it (Mendes-Gonçalves, 2017), as well as the arrangements made from regional diversities (Lima et al., 2019; Morais et al., 2018) and the realities of each municipality (Castro; Oliveira; Cunha, 2016; Pinto; Giovanella, 2018). It is not, therefore, about a banal task, as it requires the compilation of different indicators and an integrative analysis strategy.

Thus, this study aims to characterize financial transfers within the scope of the Primary Care Block (PC Block) to the municipalities of the state of São Paulo (SP) in the period between 2011 and 2017 and their relationship with the model changing process, towards achieving comprehensive PHC.

The state of SP was chosen and adopted as a privileged *locus*, due to the coexistence of sometimes antagonistic arrangements and models, represented by the implementation of FHS teams concomitantly with traditional Basic Units, which makes the Family Health Strategy's coverage in the southeast region be smaller (Miclos; Calvo; Colussi, 2017). In a scenario with such characteristics, it is considered that it would be urgent to monitor the impacts of the financial transfer for changing the model, in the name of expanding practices consistent with comprehensive PC.

## Methodology

This is a descriptive and exploratory study, of a quantitative nature and retrospective longitudinal section. In view of the objective of this study and the importance that the 2011 PNAB had in promoting actions and strategies aimed at a comprehensive PHC and the setbacks pointed out by the 2017 PNAB, the analysis covered the period from 2011 to 2017.

Information on resource transfers from the federal sphere to municipal governments was collected from the National Health Fund (NHF) website for the 645 municipalities in the state of São Paulo (SP). Transfers of these resources to the Municipal Health Funds (MHF) in SP within the scope of the Primary Care Block were selected. These financial transfers are carried out for two components: the Fixed Primary Care Floor (Fixed PCF) and the Variable Primary Care Floor (variable PCF).

Given that the value of the fixed PCF passed on during the study period had only the municipalities' number of inhabitants as a reference, it is considered that the financial incentives linked to policies that promote change in the PHC model occurred within the scope of the variable PCF. In this way, the 39 records of actions and strategies identified in the Variable Basic Care Floor component were aggregated into categories that would allow discriminating the incentives that promote comprehensive PHC. Four categories were proposed, three of which refer to such discrimination: Community Health Agents (CHA); Family Health Program (FHP); and Other incentives for changing the model (Other incentives), the latter being the aggregation of less prominent incentives, but which need to be considered when aiming to change the model. It is understood that organizing transfers linked to comprehensive PHC into these three categories allows for a better qualification

of transferred resources. The fourth and last category, called Other Variable PCF actions and strategies (Other Variable PCF), aims to identify transfers that are not linked to the model change. The aggregations according to the chosen categories are detailed in Chart 1.

When considering the importance of the Mais Médicos Program (PMM) as a potential factor for promoting comprehensive PHC in the analyzed period, given the need to hire doctors to register new FHS teams (Giovannella; Franco; Almeida, 2020; Brasil, 2015), it was necessary to estimate the values of scholarships paid to professionals linked to this policy in the municipalities of São Paulo. These amounts could not be identified in NHF transfers as they represent direct federal government spending. Adding this estimate in each municipality, in the period from 2013 to 2017, to the transfers of resources to the same cities within the scope of the AB Block allows to identify with greater precision the financial investments in the strengthening of the comprehensive PHC carried out by the federal government in the analyzed period.

The estimate was based on information sent by the Secretariat for Management of Work and Education in Health, of the Ministry of Health, on May 21, 2018, based on a request made by the authors. Of the 4,927 existing records in the original database (doctors' contracts), 148 records with inconsistencies in the doctor's dates of entry and/or departure, necessary for calculating the duration of employment and the amount spent, were excluded. From the adjusted database, it was possible to impute the value of R\$ 10,513.00 for each complete month with the presence of a doctor linked to the PMM, thus estimating the total value of scholarships spent by the federal government in each of the 389 municipalities of the state of SP who participated in the program. The estimation results were aggregated into a fifth category.

**Chart 1 – Categories and Actions and strategies of municipal transfers, state of São Paulo, 2011 to 2017**

Categories	Actions and strategies
Community Health Agents – CHA	Community Health Agents - CHA
	Complementary Financial Assistance – CHA – 95%
	Strengthening of Policies Related to the Action of the CHA Strategy - 5%
	Additional Incentive Complementary Financial Assistance – CHA – 95%
	Additional Incentive Strengthening of Pol. Related to the Action of the CHA Strategy – 5%
	Additional Incentive to the Community Health Agents Program
Family Health Program – FHP	FHP Additional Incentive
	Proesf - Phase 2
	Family Health - FH
Other incentives for model change - Other incentives	Street Office Teams – Rsm-Crac-Sm
	Incentive to the Academia da Saúde Program – Rab-Acad
	Incentive for the Implementation of Family Health Support Centers - FHSC
	Family Health Support Centers - FHSC
	Access and Quality Improvement Program – Pmaq
	Access and Quality Improvement Program – Pmaq (Rab-Pmaq-Sm)
	School Health Program - PSE
	School Health Program – School Health Week
	School Health Program – Rab-Sesc-Sm
	Food and Nutritional Surveillance with Homologated Adherence to Pmaq-AB
Other actions and strategies of the Variable PCF – Other Variable PCF	Endemic Combat Agents - ACE
	Home Care – Emad
	Home Care – Emad (Rau-Adom)
	Compensation for Regional Specificities
	Multiprofessional Support Teams - Emap
	Multiprofessional Support Teams – Emap (Rau-Adom)
	Oral Health Team - Mobile Dental Unit (Uom)
	Oral Health Team - Mobile Dental Unit (Uom) (Rab-Uodm-Sm)
	Implementation of the National Policy for Comprehensive Men’s Health Care
	Implementation of Health Care Policies for Persons with Disabilities
	Additional Incentive Mobile Dental Unit (Uom)
	Additional Incentive Mobile Dental Unit (Uom) (Rab-Uodm-Sm)
	Additional Incentive Oral Health
	Primary Care Incentive for Indigenous Peoples
	Financial Incentive for Adolescent Health Care
	Incentive for Health Care in the Penitentiary System
	Oral Health – Sb
	Rapid Pregnancy Test
	Acquisition of Dental Equipment
	Implementation of Health Care Policies for Persons with Disabilities C

Source: Authors' preparation based on the National Health Fund, Ministry of Health<sup>1</sup>

1 Data available at: <<https://portalfns.saude.gov.br/consultas/>>. Access on: Oct. 8, 2018.

The values of transfers from the NHF to the São Paulo MHF and the estimate of the PMM scholarships were deflated using the General Price Index - Internal Availability of Fundação Getúlio Vargas, average value of the year, converted to the price of December 2017, thus allowing the comparison in the historical series in real value.

Bearing in mind that the fixed PCF is transferred without requirements for specific actions by the municipalities; and the variable PCF, by adherence to the policies proposed by the federal government (Piola, 2017), it is understood that the relationship between the amounts transferred in these two transfer components indicates the tendency of municipal management to engage in certain health care strategies. The same can be said of the efforts made by the municipality in joining the PMM, since, after voluntarily joining the program, they assumed the commitment to provide housing, food and transportation for professionals, to adapt the functioning of the Basic Health Units (UBS), among others (Brasil, 2015).

In a second moment, the values of the categories “Community Health Agents (CHA)”, “Family Health Program (FHP)”, “Other incentives for model change (Other incentives)” and the estimated values for the “PMM Scholarships” were added to compose the **Incentives for model change** amount.

In order to differentiate the municipalities according to their effort in structuring actions and strategies linked to comprehensive PHC and adequately scale municipal efforts, the *per capita* value of the **Incentives for model change** and the fixed PCF was estimated, in the period from 2011 to 2017, and the relationship between them. The number of inhabitants used for the calculation was that of the population projection for the year 2014 by the State Data Analysis System Foundation (Seade)<sup>2</sup> (São Paulo, 2020).

In view of the importance of considering the population size of the municipality to understand the dynamics of FHS implementation, as already pointed out by several studies (Pinto and Giovanella, 2018;

Miclos; Calvo; Colussi, 2017; Castro; Oliveira; Cunha, 2016 ; Viana et al., 2008), municipalities were aggregated according to four groups by population size: (1) less than 10,000 inhabitants; (2) 10,000-50,000 inhabitants; (3) 50,000-100,000 inhabitants; and (4) more than 100,000 inhabitants.

With the objective of identifying the municipalities that stand out for their efforts in raising funds for the structuring of the comprehensive PHC, those that made up the fourth quartile of the *per capita ratio* between the **Incentives for model change** and the Fixed PCF, from 2011 to 2017. The 162 municipalities identified were called **highlighted municipalities**.

To verify the structuring of the comprehensive PHC, the following were selected for the same period: the Family Health Strategy coverage indicators, which indicate whether there was an increase in the number of FHS in the municipalities; home visits per inhabitant covered by the Family Health Team (FHT), understanding that the home visit is one of the main actions proposed by the comprehensive PHC; and, in addition, the percentage of municipalities that joined the Program for Access and Quality Improvement in Primary Care (PMAQ). We understand that PMAQ constitutes an evaluative initiative focused on the work process and guided by FHS guidelines, and that voluntary adherence to it, which could generate financial rewards through higher scores, can be an indication, albeit indirect, of the manager’s availability and confidence in being evaluated according to the attributes proposed by the comprehensive PHC.

For collecting data regarding FHS coverage, estimated data on the covered population and the total population were used, provided by the Ministry of Health (MS) in the E-gestor AB for the years 2011 to 2017, referring to the month of July. For collecting data on home visits, we surveyed the total number of visits carried out in 2011, made available by the Primary Care Information System (SIAB)<sup>3</sup>, and the total number of visits carried out by the FHT, PC Team and CHA Team in 2017, available in the Health Information System for Primary Care (SISAB)<sup>4</sup>.

2 Data from <<https://populacao.seade.gov.br/>>. Access on: Oct. 31, 2020.

3 Data available at: <<http://www2.datasus.gov.br/SIAB/index.php?area=04>>. Access on: Oct. 31, 2020.

4 Data available at: <<https://sisab.saude.gov.br/>> Access on: Oct. 31, 2020.

It is noteworthy that SISAB replaced SIAB and was implemented between 2013 and 2015 through the “e-SUS AB” strategy (Thum; Baldisserotto; Celeste, 2019). Finally, the data regarding adherence to the PMAQ were obtained from the databases collected in the 1st and 3rd Cycles made available on the Program’s website.

## Results

Transfers from MHF to PC Block represented, on average, 28.2% of the total transferred to municipalities. In Table 1 it can be seen that the total amount transferred in this block over the

seven years was 16.27 billion reais, in corrected values, half of which for the fixed PCF and the other for the variable PCF. It is also observed that the resources are increasing over the years 2011 to 2015, with a reduction in the years 2016 and 2017.

Among the values transferred to the variable PCF, a large part was directed to components linked to the inducing policies of the care model for a comprehensive PHC. Of the 8.13 billion *reais* transferred to the variable PCF, 90.0% of this amount included components linked to these policies, such as CHA (35.0%), FHP (34.0%) and Other incentives for model change (21.1%).

**Table 1 - Municipal transfer to the Primary Care block by components, state of São Paulo, 2011 to 2017**

(In millions of reais)

Years		Components								
		PC Block	Fixed PCF	Variable PCF	Other Variable PCF	CHA	FHP	Other Incentives	PMM Scholarships*	Total Incentives Model Change
2011	Value	<b>2,055.74</b>	1,116.97	938.77	117.00	374.85	404.66	42.27		821.78
	%	<b>100.0</b>	54.3	45.7	5.7	18.2	19.7	2.1		
2012	Value	<b>2,449.40</b>	1,261.25	1,188.16	131.12	411.44	468.56	177.05		1,057.04
	%	<b>100.0</b>	51.5	48.5	5.4	16.8	19.1	7.2		
2013	Value	<b>2,302.77</b>	1,147.12	1,155.66	118.27	390.77	379.26	267.36	<b>11.31</b>	1,048.69
	%	<b>100.0</b>	49.8	50.2	5.1	17.0	16.5	11.6		
2014	Value	<b>2,458.22</b>	1,244.84	1,213.38	135.18	407.88	371.27	299.06	<b>248.43</b>	1,326.63
	%	<b>100.0</b>	50.6	49.4	5.5	16.6	15.1	12.2		
2015	Value	<b>2,433.82</b>	1,145.20	1,288.61	162.62	435.98	383.36	306.66	<b>323.59</b>	1,449.59
	%	<b>100.0</b>	47.1	52.9	6.7	17.9	15.8	12.6		
2016	Value	<b>2,290.60</b>	1,067.51	1,223.09	83.14	433.47	393.43	313.04	<b>290.76</b>	1,430.71
	%	<b>100.0</b>	46.6	53.4	3.6	18.9	17.2	13.7		
2017	Value	<b>2,282.43</b>	1,154.75	1,127.68	64.38	389.86	364.42	309.03	<b>289.41</b>	1,352.72
	%	<b>100.0</b>	50.6	49.4	2.8	17.1	16.0	13.5		
Total	Value	<b>16,272.98</b>	8,137.63	8,135.35	811.70	2,844.24	2,764.96	1,714.45	<b>1,163.50</b>	8,487.16
	%	<b>100.0</b>	50.0	50.0	5.0	17.5	17.0	10.5		

Source: : Fundo Nacional de Saúde, Ministério da Saúde

Note: Values deflated at December 2017 prices, according to FGV's IGP-DI

\* The Mais Médicos project begins to be implemented in 2013

When added to the 1.16 billion *reais* related to scholarships paid under the PMM, in the period from 2011 to 2017, we arrive at the value of 8.49 billion *reais*, identified as **Incentives for model change**.

As shown in Table 2, the distribution of this value by São Paulo municipalities, aggregated by population size, allows us to verify that the largest ones, with a population above 100 thousand inhabitants, account for 62.0% of the **Incentives for model change** in the analyzed period (5.26 billion *reais*). At the other end, smaller municipalities, with up to 10,000 inhabitants, account for 8.9% of the value (703.43 million *reais*). It is worth mentioning that this same analysis, considering the

8.14 billion *reais* allocated to the Fixed PCF, makes it possible to identify a higher concentration in larger municipalities, of 71.2% (5.79 billion *reais*), while the smaller ones received 4.4% of these transfers (361.6 million *reais*).

On the other hand, the *per capita* analysis of resources shows that smaller municipalities have a higher value per inhabitant, both in relation to the fixed PCF and the **Incentives for model change**, of R\$ 263.07 and R\$ 511.75, respectively. At the other end, larger municipalities have the lowest values, with R\$ 181.71 and R\$ 165.03, respectively. A gradual increase in *per capita* values is observed as the population size of the municipality decreases.

**Table 2 - Municipalities, population, municipal transfer to the Primary Care block according to population size of the municipality, state of São Paulo, 2011 to 2017**

	More than 100 thousand inhab.	From 50 thousand to 100 thousand inhab.	From 10 thousand to 50 thousand inhab.	Less than 10 thousand inhab.	Total
Municipalities	75	55	239	276	645
Population in 2014	31,888,949	3,834,403	5,575,474	1,374,560	42,673,386
Fixed PCF (in millions of <i>reais</i> )	5,794.57	766.5	1,214.96	361.6	8,137.63
Fixed PCF (%)	71.2	9.4	14.9	4.4	100.0
Model Change Incentive (in millions of <i>reais</i> )	5,262.71	854.79	1,666.23	703.43	8,487.16
Model Change Incentive (%)	62.0	10.1	19.6	8.3	100.0
A: Per Capita Fixed PCF	181.71	199.90	217.91	263.07	190.70
B: Per Capita Incent. Model Change	165.03	222.93	298.85	511.75	198.89
B/A ratio in <i>reais</i> [Mean]	0.8	1.1	1.4	2.1	1.6
B/A ratio in <i>reais</i> [Median]	0.7	1.0	1.4	2.0	1.5

Source Fundação Seade (São Paulo, 2020); Fundo Nacional de Saúde, Ministério da Saúde

Note: Values deflated at December 2017 prices, according to FGV's IGP-DI.

The average ratio between the *Incentives to change model* and the fixed PCF of the municipalities shows that, the smaller the municipality, the greater the value of the **Incentives for model change**, as compared to the fixed PCF. While the mean ratio among the 645 municipalities is 1.6, in cities with less than 10,000 inhabitants it is 2.1, gradually

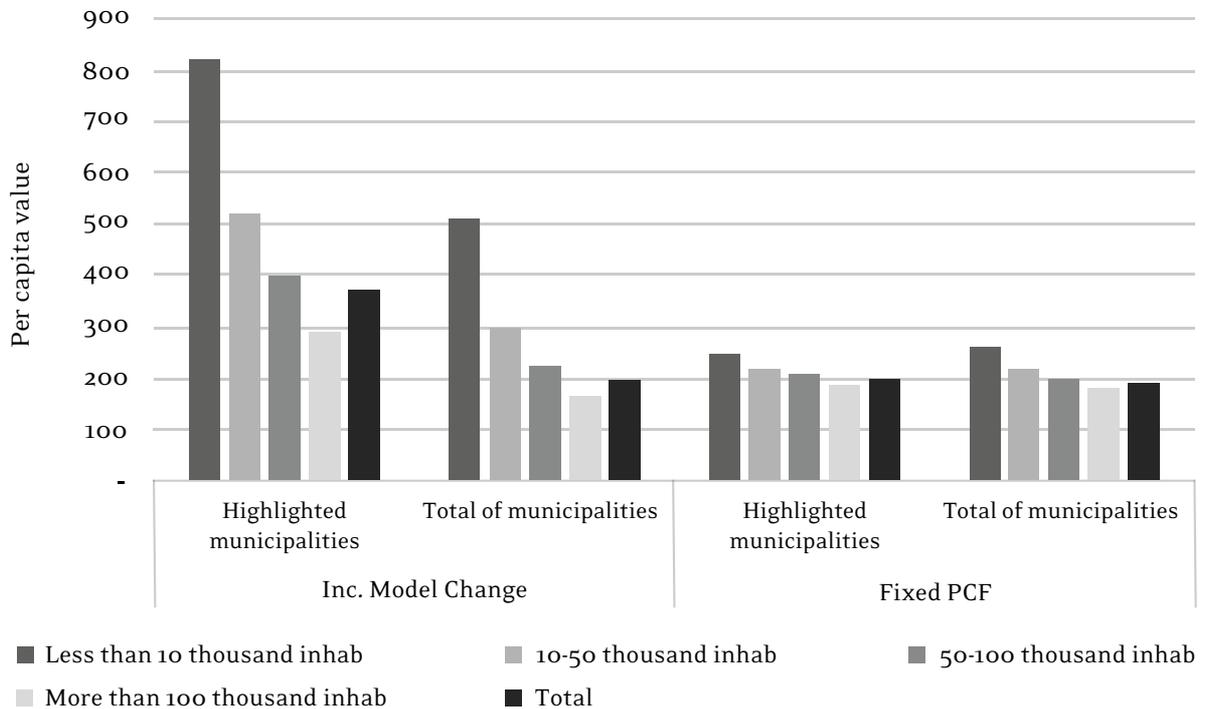
decreasing as the population size increases, until reaching 0.8 in municipalities with more than 100 thousand inhabitants.

Figure 1 allows dimensioning in the set of **highlighted municipalities** the difference between the *per capita* transfer of **Incentives for model change** (R\$ 372.36) and the fixed PCF (R\$ 198.77), in the period

from 2011 to 2017. The amplitude of this difference increases as the population size of the municipality decreases, and the *per capita value* of Incentives for model change in the population group with less than 10 thousand inhabitants (R\$ 821.72) it is more than three times the value of the Fixed PCF (R\$ 246.24).

The *per capita value* of Incentives for model change among the **highlighted municipalities** (R\$ 372.36) represents 1.9 times the value among the total municipalities (R\$ 198.89). It is possible to observe that the greatest differences are found in municipalities with larger populations.

**Figure 1 – Per capita value of the municipal transfer of the highlighted municipalities and the total number of municipalities by population size, state of São Paulo, 2011 to 2017.**



Source: Seade Foundation (São Paulo, 2020); National Health Fund, Ministry of Health.

The smaller the population size of the municipality, the greater the FHS coverage. It is observed that the **highlighted municipalities** had greater coverage in the two analyzed periods, 2011 and 2017, as well as a smaller variation difference in the period, as compared to the total of municipalities. Despite the lower coverage, the **highlighted municipalities** with more than 100,000 inhabitants show a wide variation in FHS coverage at the time analyzed (35.4%), as can be seen in **Table 3**.

Regarding home visits and **highlighted municipalities**, in 2011 only municipalities with more than 100,000 inhabitants differed in relation to the total set. In 2017, only municipalities with 50,000 to 100,000 inhabitants did not differ in relation to the total.

The **highlighted municipalities** showed greater adherence to the PMAQ in 2011 and 2017, especially those with more than 50,000 inhabitants. It is noteworthy that, in 2017, 100% of them joined the program.

**Table 3 – Coverage of the Family Health Strategy, Municipalities that adhered to the National Program for Access and Quality Improvement in Primary Care and Home Visits by highlighted municipality; and total number of municipalities according to population size, state of São Paulo, 2011 and 2017**

Indicator and highlighted municipalities		More than 100 thousand inhabitants		From 50 thousand to 100 thousand inhabitants		From 10 thousand to 50 thousand inhabitants		Less than 10 thousand inhabitants		Total	
		2011	2017	2011	2017	2011	2017	2011	2017	2011	2017
FHS coverage	Highlighted municipalities	43.6	59.0	75.8	82.1	85.6	89.3	93.7	98.8	57.8	69.2
	Total	23.7	32.8	33.9	40.5	45.1	57.3	64.6	78.2	28.7	38.1
% of municipalities that joined PMAQ*	Highlighted municipalities	93.3	100.0	90.9	100.0	85.4	95.8	85.5	98.2	86.8	97.6
	Total	78.7	90.7	72.7	87.3	66.1	87.5	56.5	89.1	64.0	88.5
Home visit per inhab. covered by FHS	Featured municipalities	0.3	1.8	0.2	1.5	0.4	2.4	0.8	2.8	0.3	1.9
	Total	0.2	1.0	0.3	1.8	0.4	2.1	0.8	2.4	0.3	1.4

Source: Fundação Seade (São Paulo, 2020); Sistema de Informação da Atenção Básica – SIAB; Sistema de Informação em Saúde para a Atenção Básica – SISAB; e-gestor AB.  
\* PMAQ data refer to the years 2012 and 2017

## Discussion

The study sought to aggregate and describe incentives for changing the model in PC in order to consolidate comprehensive PHC. Its results made it possible to highlight the importance of **Incentives for model change** in transfers from the NHF to the São Paulo MHF, in the analyzed period. It was verified that the incentives for the FHP and PACS continued to be preponderant, even though over time several new strategies have been formulated and financed. It was possible to observe that the smallest municipalities are relatively more benefited by the **Incentives for model change**.

In general, the way resources are transferred, for both the fixed PCF and the variable PCF, in particular for the FHP, seeks to correct inequalities in this distribution, favoring smaller municipalities with higher values. Regarding the fixed PCF, this adjustment is made according to population size and criteria that consider demographic density, vulnerability condition and population covered by private health plans (Mendes; Marques, 2014). This transfer method

results in a constant distribution, which includes all Brazilian municipalities, regardless of the municipal management performance, and justifies the differences in *per capita* values according to the population sizes identified in this study.

Regarding the **Incentives for model change**, adjustments are also foreseen for the values transferred monthly to the FHS according to criteria that include the municipality's population size. Ordinance no. 978, of May 16, 2012 (Brasil, 2012a), provides for a transfer per registered team with a higher value for municipalities with less than 30,000 inhabitants (except in the states of the Legal Amazon, which may have up to 50,000 inhabitants), and larger municipalities that cover the remaining population of *quilombos* or residents in settlements. However, it should be noted that the resource is accessed through the municipal management's adherence to the actions and strategies suggested by the Ministry of Health, demanding efforts in the organization of local assistance to meet the established requirements. The role of municipalities gains relevance when one considers that the federal resources passed on are still insufficient to cover

the FHS expenses; estimates indicate that these represent only 33.8% of expenditures on the Family Health Strategy (Mendes; Carnut; Guerra, 2018; Mendes; Marques, 2014).

It appears, then, that the high *per capita* values of **Incentives for model change** identified in smaller municipalities point to the importance of this type of financing, especially for less populous municipalities. This aspect is highlighted when considering the difficulties faced by managers in smaller cities in structuring their care network, related to economies of scale and the recruitment and retention of professionals (Araújo; Gonçalves; Machado, 2017; Miclos; Calvo; Colussi, 2017).

It is also worth mentioning the possible constraints imposed by the Fiscal Responsibility Law (LRF) on public administrations that, in many moments, can inhibit the expansion, or even lead to FHS reduction (Mendes; Marques, 2014). Although this topic is recurrent on the agenda of municipal managers, there is no consensus on the real limits imposed by the LRF on hiring personnel for health care (Medeiros et al., 2017).

Although this picture may indicate motivations for the non-engagement of municipal administrations in setting up an FHS, this study showed that a significant number of the 645 São Paulo municipalities received these incentives at some point, suggesting the importance of financial transfers to mobilize the implementation of such a model.

In 2011, 83 municipalities did not access resources linked to **Incentives for model change** and, in 2017, there were only 19 municipalities in these conditions. This data demonstrates that almost all municipalities in the state of SP are committed, to some extent, to implementing actions and strategies linked to comprehensive PHC. It is also possible to infer that there was a greater engagement from them over the analyzed period, not only due to the number of municipalities that became involved in the structuring of a comprehensive PHC, but also in relation to the amounts raised, which grew in the period from 2011 to 2015. The increase in values is largely due to the implementation of the PMM in the period.

If, with regard to the financial resources passed on by the federal government, it was possible to

observe the willingness of São Paulo municipal administrations to implement actions and strategies linked to comprehensive PHC, their effectiveness is not easy to measure, despite the existence of regional initiatives, such as the QualiAB, held in the state of SP (Castanheira et al., 2014). Without specific indicators that frequently monitor the implementation of actions to which the **Incentives for Model Change** refer, in this study we analyzed the information regarding FHS coverage, adherence to PMAQ and Home Visits. Despite the heterogeneity of the composition of these indicators to guide the paths that PC is following in the municipalities, it became clear that they are insufficient to assess the changes in the work process of Primary Care, aiming at a comprehensive PHC in the territory. In this sense, it is important to emphasize the limitation of the data available in the E-gestor AB reports and the impact of the modification of the PC's information system in the analyzed period. The implementation of the SIAB faces major challenges in the municipalities (Thum; Baldisserotto; Celeste, 2019), impacting the quality of the few data that are published.

Realizing and finding alternatives to overcome this limitation is essential. Without proper monitoring, there is room for generic and imprecise claims related to the completeness resulting from the expansion of coverage (Onocko; Furtado, 2014; Castro; Oliveira; Cunha, 2016). The risk is known that, even with the expansion, funding is still inducing a biomedical model when considering the payment through the monitoring of medical and nursing procedures, without the proper conditions to verify the teams' more comprehensive practices (Morosini; Fonseca; Baptista, 2020). It is difficult to demonstrate this type of incongruity with data from the study period. Within the presented limitations, this research showed that the FHS Coverage has a direct relationship with the financial resource received, because for each new team registered by the manager, the MS transfers the corresponding value. In this way, growth was expected in municipalities with lower coverage, also considering the creation of the PMM, which allowed the presence of physicians in the teams, enabling their registration with the ministry.

As for information on Home Visits, it should be noted that the Ministry of Health replaced SIAB with SISAB in 2013, with the aim of qualifying and expanding the coverage of the Primary Care information system, which is evidenced by the increase in municipalities with information on home visits who responded to the PMAQ. However, it is necessary to consider that changing the system will probably not be enough to fill the gap in knowledge about the care model, if specific indicators are not increased and made available for this purpose. This proposition refers, in other words, to the construction of information on actions related to comprehensive PHC, considering its already recognized attributes, such as integrality, longitudinality and coordination of care, plus indicators related to territorial actions, collective care, intersectoral articulations and in network, and an expanded clinic - with regard to individual care (Morosini; Fonseca; Baptista, 2020; Giovanella; Franco; Almeida, 2020). It is important to highlight that the information currently collected by the SIAB presents potential for new analyses in this sense, as it allows exploring details of home visits and intersectoral actions and care coordination, being able, with a focus on work processes, to bring new elements for analysis of the care model practiced in Primary Care. In this way, the availability of these data for public consultation is essential to ensure monitoring and transparency in PC assessment, stimulating the building of a culture of formative assessment that contributes to the dissolution of the punitive nature of assessments. Returning to the challenges listed by Fertoni et al. (2020) for instituting a comprehensive PHC in the municipalities, this study contributed to show that the obstacles related to democratic radicalization in the formulation, implementation and evaluation of health policies in the territory are reproduced with the difficulties of access to data in their entirety, extending to the absence of indicators referring to the practices and care model adopted, as well as to the fragmentation of information that makes its analysis difficult.

The recent changes proposed by the Ministry of Health, embodied in the Previn Brasil Program (Brasil, 2019), promote a structural change

in the logic of PC incentives, which includes payment for performance, which could stimulate changes in the evaluative culture of Primary Care. However, by opting for indicators that are already traditional and centered on strictly biomedical care procedures (Brasil, 2020c), it does not advance in inducing a process of monitoring the work process of a comprehensive PHC or the model of care underlying it (Morosini; Fonseca; Baptista, 2020).

These and the other changes imposed by the new financing of the PC policy have, moreover, little chance of being properly debated by the population, due to the pre-existing gaps in relation to the monitoring and evaluation of Primary Care practices. Thus, discussions tend to be maintained so as to exclude the population, even though it is the most affected, if the perspectives of precarious care are fulfilled, and of deepening the withdrawal of the social and democratic nature of health policy, as already pointed out by Giovanella, Franco and Almeida (2020) and Morosini, Fonseca and Baptista (2020).

Thus, there is still a need to build model evaluation strategies in PC capable of contributing to the monitoring and consolidation of the FHS, so that they can also be used to support arguments and mobilize the population against the threats of dismantling that often arise. Permanent channels, with transparency of data and their significance for public policy, are more than necessary.

Therefore, investments would be necessary in the effective implementation of the SIAB, with the publication of data already collected, aimed at increasing the indicators, which would start to condense relevant aspects of the work process linked to the comprehensive PHC, added to continuous efforts to simplify access, so that they are in the public domain and understandable to the lay public as well.

## Final considerations

The exercise of aggregation, presentation and analysis undertaken in this article demonstrated the relevance of financial transfers aimed at inducing the care model. However, it was also noted that the evaluation of the change in the care

model does not represent an aspect that is easy to understand, limiting the possibilities of monitoring the results of using financing as a mechanism that induces changes in favor of a model linked to the comprehensive PHC proposal.

From the identification of the **Incentives for model change**, the importance that these resources assumed in the financing of Primary Care in the state of SP, especially in smaller municipalities, was clear. On the other hand, the current care model is not properly explained from the analyzed indicators. Thus, the need to complement the use of funding as a device to induce model change with evaluation processes specifically aimed at consolidating comprehensive PHC was demonstrated.

It is known that funding alone, especially considering chronic underfunding and the freezing of health spending, does not guarantee a model change, which is a multidetermined aspect. However, the study in question indicates that its participation cannot be neglected, as the funding proved to be capable of promoting equity in the regional distribution of resources, by enabling access, especially for municipalities with small populations. And, by attracting small municipalities, it configures a powerful device for pollination of model change policies, as long as it is duly complemented by government plans - local, regional and federal - aimed at strengthening PC; continuous training of human resources, a culture of monitoring results, and the indispensable involvement of the population.

Given so many challenges, with such complex natures, the new proposal formed by the package of performance indicators suggested in the Previner Brasil Program seems overly reductionist. It is necessary to keep discussions open and maintain investments for a care model concerned with comprehensive health care for the population, something that cannot be objectively guaranteed in the current scenario.

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### Authors' contribution

Duarte, Viana, Scalco and Garcia were responsible for conceiving the original idea, organizing the information, and writing and revising the text. Felipe participated in organizing the information and preparing the tables.

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