




Public Health Financing in the State of Rio de Janeiro: Overview (2015 to 2018), Challenges, and Reflections

Financiamento da Saúde Pública no Estado do Rio de Janeiro: panorama (2015-2018), desafios e reflexões

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ABSTRACT

Objectives: To present the allocation of resources in public health in the State of Rio de Janeiro from 2015 to 2018, originating from the National Health Fund, and demonstrate the importance of understanding the management of public health resources. **Methods:** A quantitative descriptive study based on data extraction from the period 2015 to 2018 available on the National Health Fund (FNS) portal, as well as some regulatory instruments such as the Multiannual Plan (2016-2019), made available on the State Transparency Portal. **Results:** Based on the data extracted from the FNS, a total of R\$22,002,986,283.17 was executed for health, with R\$480,758,737.56 allocated to Pharmaceutical Assistance and R\$4,428,294,397.74 to Primary Care, equivalent to 2.18% and 20.13%, respectively. In the Pharmaceutical Assistance scenario, the amount budgeted for the quadrennium was R\$621,551,730.00, but R\$571,802,443.20 was executed, corresponding to 92%. It is noteworthy that the Farmácia Popular program saw a decrease in the budget from R\$5 million in 2015 to R\$2.8 million in 2017. **Conclusions:** The study reinforces the relevance of the debate surrounding the financing of the Unified Health System (SUS) and the importance of understanding the challenges in the allocation of public health resources, aiming for active management and the consolidation of a universal and comprehensive SUS.

Keywords: Health financing; Unified Health System; Management; Rio de Janeiro; Pharmaceutical Assistance

RESUMO

Objetivos: Apresentar a alocação de recursos em saúde pública no Estado do Rio de Janeiro no período de 2015 a 2018, advindos do Fundo Nacional de Saúde, e demonstrar a importância da compreensão da gestão dos recursos públicos em saúde. **Métodos:** Estudo quantitativo descritivo, a partir da extração de dados do período de 2015 a 2018 disponíveis no portal do Fundo Nacional de Saúde (FNS), bem como alguns instrumentos regulatórios como o Plano Plurianual (2016-2019), disponibilizados no Portal da Transparência do Estado. **Resultados:** Mediante os dados extraídos do FNS, constatou-se um total executado de R\$22.002.986.283,17 com a saúde, sendo destes R\$480.758.737,56 alocados na Assistência Farmacêutica e R\$4.428.294.397,74 na Atenção Primária, equivalente a 2,18% e 20,13%, respectivamente. No cenário da Assistência Farmacêutica, o valor previsto para o quadriênio foi de R\$621.551.730,00, porém executou-se R\$571.802.443,20, o que correspondeu a 92%. Destaca-se que o programa Farmácia Popular apresentou diminuição no orçamento de R\$5 milhões em 2015 para R\$2,8 milhões em 2017. **Conclusões:** O estudo reforça a relevância do debate em torno do financiamento do Sistema Único de Saúde (SUS) e a importância de compreender os desafios na alocação de recursos públicos em saúde, visando uma gestão ativa e a consolidação de um SUS universal e integral.

Palavras-chave: Financiamento em saúde; Sistema Único de Saúde; Gestão; Rio de Janeiro; Assistência Farmacêutica

Introduction

Since the 1988 Federal Constitution, health has been recognized as a right guaranteed to every Brazilian citizen.^{1,2} Numerous efforts and initiatives have been undertaken since the regulation of the Unified Health System (SUS), aimed at promoting universal and free access to health actions and services. It is worth noting that the SUS is a complex system based on principles such as regionalization, decentralization, hierarchy, and popular participation, designed to serve more than 200 million individuals across different levels of care and health service complexity.^{1,3,4} In this context, the coordination and cooperation among the federal, state, and municipal management levels are of utmost importance to ensure comprehensive responses to the population's health needs and demands.⁵⁻⁷ Among the various actions and programs within the SUS, the National Immunization Program (PNI) stands out. Since its creation in 1973, the PNI has significantly contributed to reducing morbidity and mortality from infectious diseases, as well as to the eradication of smallpox and poliomyelitis. Currently, over 20 immunobiologicals are included in the National Vaccination Schedule,^{8,9} and during the COVID-19 pandemic, more than 585.6 million doses were administered, an achievement that helped reduce COVID-19 related deaths by 96.4%.^{10,11} It is also important to highlight that, in order to meet its objectives, the PNI budget has grown substantially over time, from R\$94 million in 1995 to R\$4.3 billion in 2017.¹²

Regarding the financing of health actions, Complementary Law (LC) No. 141 of 2012 stands out, as it establishes the minimum amounts to be transferred annually by each level of government. According to this law, municipalities and states must allocate at least 15% and 12%, respectively, of their revenues to health. Meanwhile, the federal government must allocate an amount equivalent to that of the previous year, adjusted by the variation in the Gross Domestic Product (GDP).¹³ Additionally, Ordinance No. 204 of 2007 established that the organization of public health funding transfers would be structured into specific funding blocks, which included: Primary (Basic) Care, Medium and High Complexity

Outpatient and Hospital Care, Health Surveillance, Pharmaceutical Assistance, SUS Management, and Investments in the Health Services Network.¹⁴ Consequently, the allocation and use of health resources were to be managed through the so-called Health Funds, which had to comply with their respective funding blocks. In other words, public funds allocated to the Pharmaceutical Assistance block, for instance, could not be used for the Health Surveillance block. However, with the publication of Ordinance No. 3,992 of 2017, this structure was revised, from six funding blocks to only two, namely: Financing of public health actions and services (operational costs), and Investment in the public health service network. This reform allowed greater flexibility for health managers to reallocate funds according to local priorities and needs.¹⁵⁻¹⁷

Given the many challenges and demands in Brazil's public health sector, it is essential to develop tools and strategies that promote transparency, traceability, and understanding among managers and, above all, the general population regarding the allocation of public health resources.

In this context, the National Health Fund (Fundo Nacional de Saúde – FNS) has emerged as an important instrument within the framework of public health financing in Brazil, as it enables public access to detailed and consolidated information on transfers and payments made to health-related financial resources executed by each level of government.^{18,19} Fernandes and Pereira²⁰ emphasize the relevance and reliability of this platform, as well as its capacity to monitor balances and detailed transfers between different health funds. In addition to the FNS, another key tool is the Pluriannual Plan (Plano Pluriannual – PPA),¹ a major medium-term governmental planning instrument that outlines the targets and investments projected for various governmental areas, in accordance with each corresponding level of management.²¹⁻²³

It is noteworthy that there are still few publications addressing the evaluation and overview of public health resource allocation in Brazil at the national level.²⁴⁻²⁸ Some studies have focused specifically on the State of Rio de Janeiro and/or its municipalities.²⁹⁻³¹ In a study examining the financing conditions of the Unified Health System (SUS) in the

State of Rio de Janeiro, Lira²⁹ highlights the leading role of municipalities, noting that their main source of funding generally comes from their own revenues. The study also demonstrates that municipalities comply with the minimum constitutionally established contribution of 12%.¹³ Findings such as those presented by Lira²⁹ underscore the need for further research and analysis aimed at providing a clearer picture of how public health resources are allocated in the state, an area of significant socioeconomic importance for the country as a whole.

According to the Brazilian Institute of Geography and Statistics (IBGE), the State of Rio de Janeiro is the third most populous state in the country, with approximately 16 million inhabitants, based on the latest census conducted in 2022. With a Human Development Index (HDI) of 0.762, it ranks as the eighth highest among Brazilian states.³² Moreover, Rio de Janeiro holds the position of the second-largest economy in Brazil,³³ standing out for its oil-related activities, particularly the exploration and production of petroleum along its coastline, which accounts for approximately 84% of the nation's total oil production.³⁴ Data from the Royalties Transparency Portal³⁵ show that between January and July 2023 alone, the state received over R\$13 billion in royalty revenues.³⁵

Given the limited number of publications addressing healthcare financing,²⁴⁻³¹ particularly in the State of Rio de Janeiro, this study aims to present an overview of the allocation of public health resources in the state between 2015 and 2018, based on data from the National Health Fund (FNS). Furthermore, it seeks to highlight the importance of deepening the understanding and knowledge of health resource management in one of Brazil's most economically and strategically significant states.

Methodology

This is a descriptive quantitative study designed to provide a clearer understanding of the distribution and transfer of public health resources in the State of Rio de Janeiro, within the Unified Health System (SUS) framework, for the period 2015 to 2018, based on data from the National Health Fund (FNS). Data were obtained from the National Health

Fund platform, which provided the total transfer amounts by funding blocks,³⁶ as well as from state regulatory instruments, including the Pluriannual Plan (2016-2019),³⁷ Monitoring Reports,³⁸ and Summarized Budget Execution Reports (RREO).³⁹ The data collection, tabulation, and analysis stages were conducted during the second half of 2023.

On the National Health Fund (FNS) website, under the "Consultations and Transfers" section, data were collected from the transfer statements of financial resources made for each funding block. It was also possible to conduct a detailed consultation for specific health funding blocks related to the State of Rio de Janeiro during the 2015-2018 period (Access: <https://portalfns.saude.gov.br/consultas/>). It is important to note that, for this study period, the detailed consultation by funding block was available only for the Pharmaceutical Assistance block, which included the National Program for the Qualification of Pharmaceutical Services, the National Program of Medicinal Plants and Herbal Medicines, the Program for the Acquisition of Exceptional Medicines, the National Policy for Comprehensive Health Care for People Deprived of Liberty in the Prison System, and the Popular Pharmacy Program.

Additionally, data were analyzed for the Primary Care block, specifically the Fixed Primary Care Floor (PAB Fixo) and the Variable Primary Care Floor (PAB Variável). Unfortunately, the FNS did not provide detailed data on the allocation of public health resources for all funding blocks during the study period.

Additionally, a search was conducted on the State Treasury Department's portal (<https://portal.fazenda.rj.gov.br/transparencia/>) to obtain the Summarized Budget Execution Reports (RREO), and on the Planning Network Portal (REDE-PLAN) (<https://www.redeplan.planejamento.rj.gov.br/planejamento.html#lido>) to extract the Pluriannual Plan (PPA) and Monitoring Reports.^{37, 38} In addition to data extraction, supplementary literature reviews were carried out to complement and contextualize the findings, enhancing the understanding of results presented in previous studies.^{2, 3, 7, 16, 22, 23, 26, 55, 57, 59}

After data collection, Google Sheets® and Microsoft Excel® 2007 were used to perform frequency calculations, stratification, and tabulation of values,

along with the creation of charts and graphs to better illustrate the distribution profile of public resources transferred from the National Health Fund (FNS) across each health funding block in the State of Rio de Janeiro between 2015 and 2018.

It is important to note that, given the limited four-year analysis period of this study, it was not possible to conduct a time-series analysis (i.e., trend or long-term behavior analysis of the evaluated records).⁴⁰

Results

From the data analysis, it was found that the total amount of resources allocated to the State of Rio de Janeiro from the National Health Fund (FNS) reached R\$22,002,986,283.17 during the 2015-2018 period. Table 1 presents the amounts transferred by the FNS to each health funding block in the state

during this period, showing that R\$480,758,737.56 were allocated to Pharmaceutical Assistance and R\$4,428,294,397.74 to Primary Care. As illustrated in Figure 1, the percentage distribution profile of public health resources among the funding blocks reveals that Medium and High Complexity Care accounted for 72.42% of total health expenditures, while Primary Care represented 20.13%, based on FNS data.

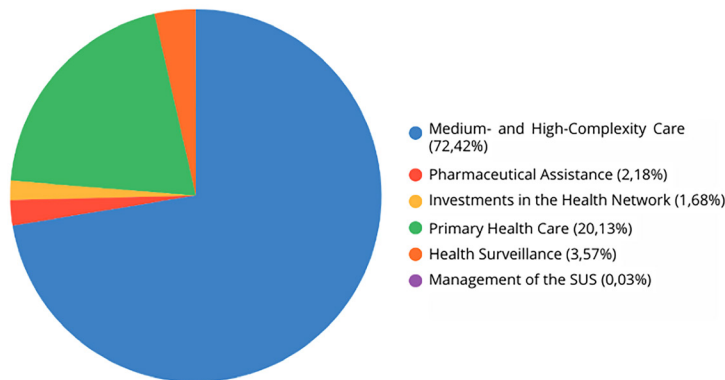
Regarding the detailed consultation by funding blocks available on the FNS portal, it was observed that the Primary Care block accounted for a total of R\$4,428,294,397.74, representing 20.13% of the total health resources allocated to the State of Rio de Janeiro between 2015 and 2018. Additionally, within this block, R\$1,937,219,965.85 were designated for the Fixed Primary Care Floor (PAB Fixo) and R\$2,491,074,431.89 for the Variable Primary Care Floor (PAB Variável), as shown in Table 1.

Chart 1. Public Resource Transfers to Health in the State of Rio de Janeiro Between 2015 and 2018, According to FNS Data

Health Financing Block – FNS							
Year	Management of the SUS	Pharmaceutical Assistance	Primary Health Care	Health Surveillance	Medium and High-Complexity Specialized Care	Investments in the Health Network	Total
2015	R\$ 870.300,00	R\$ 116.969.157,47	R\$ 950.195.524,08	R\$ 160.035.980,96	R\$ 3.678.260.109,07	R\$ 105.454.799,15	R\$ 5.011.785.870,73
2016	R\$ 1.694.500,76	R\$ 131.826.389,34	R\$ 1.054.437.347,49	R\$ 207.164.047,22	R\$ 3.731.229.041,79	R\$ 151.706.580,44	R\$ 5.278.057.907,04
2017	R\$ 1.325.000,00	R\$ 110.776.527,08	R\$ 1.070.678.203,99	R\$ 183.858.122,06	R\$ 4.011.418.852,27	R\$ 82.737.459,74	R\$ 5.460.794.165,14
2018	R\$ 1.853.000,00	R\$ 121.186.663,67	R\$ 1.352.983.322,18	R\$ 234.263.541,10	R\$ 4.512.611.733,40	R\$ 29.450.079,91	R\$ 6.252.348.340,26
Total	R\$ 5.742.800,76	R\$ 480.758.737,56	R\$ 4.428.294.397,74	R\$ 785.321.691,34	R\$ 15.933.519.736,53	R\$ 369.348.919,24	R\$ 22.002.986.283,17

Source: FNS, 2023.³⁶ Accessed on Nov 07, 2023

Figure 1. Profile of Public Health Resource Distribution in the State of Rio de Janeiro from 2015 to 2018, According to FNS Data



Source: FNS, 2023.³⁶ Accessed on Nov 15, 2023

Table 1. Demonstration of Resources Allocated to Primary Care in the State of Rio de Janeiro from 2015 to 2018, According to FNS Data

Year	Fixed Primary Care Minimum Funding	Variable Primary Care Minimum Funding	Total
2015	R\$ 395.411.375,75	R\$ 554.784.148,33	R\$ 950.195.524,08
2016	R\$ 464.640.941,37	R\$ 589.796.406,12	R\$ 1.054.437.347,49
2017	R\$ 496.732.286,85	R\$ 573.945.917,14	R\$ 1.070.678.203,99
2018	R\$ 580.435.361,88	R\$ 772.547.960,30	R\$ 1.352.983.322,18
Total	R\$ 1.937.219.965,85	R\$ 2.491.074.431,89	R\$ 4.428.294.397,74

Source: FNS, 2023.³⁶ Accessed on nov 15, 2023.

In the context of Pharmaceutical Assistance, it was found that the Program for the Acquisition of Exceptional Medicines received a total of R\$113,013,489.99, while the Popular Pharmacy of Brazil Program accounted for R\$12,550,000.00. The Basic Pharmaceutical Assistance Program was allocated R\$348,358,789.24, and the National Program for the Qualification of Pharmaceutical Services (QUALIFAR-SUS) received R\$2,487,296.76. Additionally, the National Policy for Comprehensive Health Care for People Deprived of Liberty in the Prison System (PNAISP) received R\$2,966,743.17, and the National Program of Medicinal Plants and Herbal Medicines was allocated R\$1,382,418.40, as shown in Table 2. It is noteworthy that Pharmaceutical Assistance accounted for 2.18% of the funds transferred by the National Health Fund (FNS) to the State of Rio de Janeiro, while 0.03% was allocated to SUS management, 3.57% to Health Surveillance, 72.42% to Medium and High Complexity Care, and 1.68% to Health Network Investment activities during the period 2015-2018.

Figure 2 illustrates the heterogeneity in the amounts transferred from the National Health Fund (FNS) to the Pharmaceutical Assistance sector across the municipalities of the State of Rio de Janeiro between 2015 and 2018. The Northern Fluminense region received a total of R\$19,717,901.93, while the Central-Southern region allocated R\$6,983,447.89. In the Metropolitan region, resources amounted to R\$382,781,233.23, whereas the Médio Paraíba region recorded R\$21,168,115.21.

Additionally, the Baixada Litorânea region received R\$17,121,966.11, the Costa Verde region received R\$6,309,365.53, the Mountain (Serrana) region was allocated R\$19,333,606.56, and the Northwestern region obtained R\$7,346,257.82 in public funds designated for this area.

Additionally, in 2015, the investment in the Popular Pharmacy Program amounted to R\$5,212,500.00, decreasing to R\$4,487,500.00 in 2016 and R\$2,850,000.00 in 2017, as shown in Figure 3.

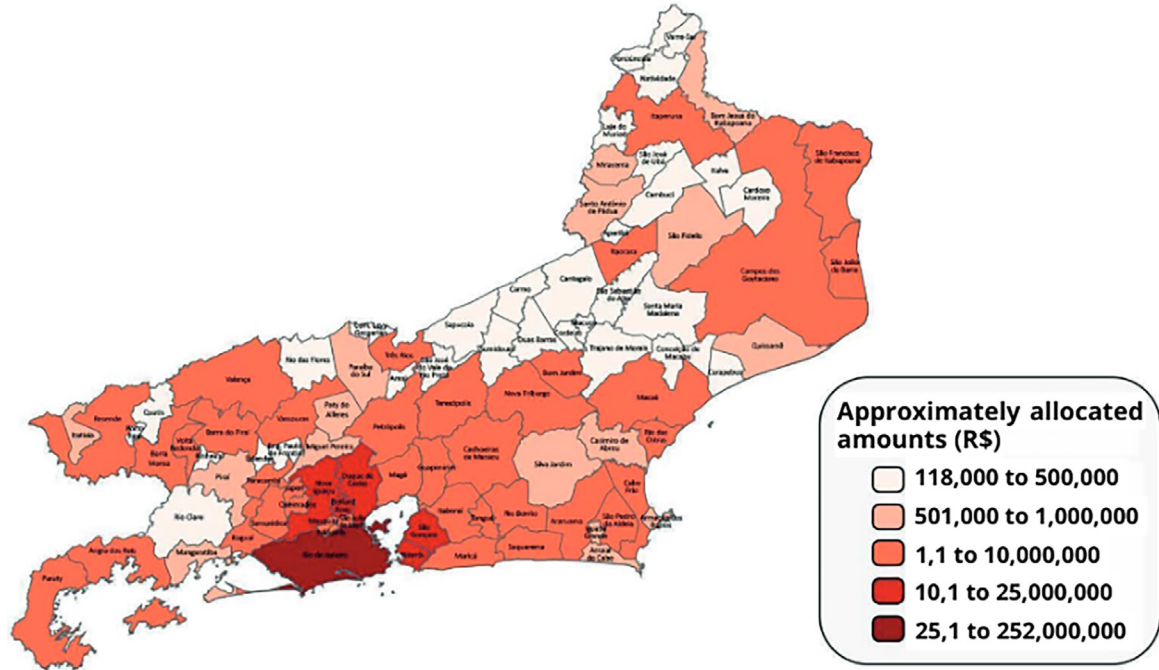
Chart 2. Actions of the Pharmaceutical Services Funding Block in the State of Rio de Janeiro from 2015 to 2018, According to FNS Data

Actions of the Pharmaceutical Assistance Block from 2015 to 2018 – National Health Fund (FNS)							
Year	Program for the Acquisition of Exceptional Medicines	Brazilian Popular Pharmacy Program	Basic Pharmaceutical Assistance Program (Installments)	Brazilian National Program for the Qualification of Pharmaceutical Assistance	People Deprived of Liberty (PNAISP)	Brazilian National Program on Medicinal Plants and Herbal Medicines	Total
2015	R\$ 33.359.992,40	R\$ 5.212.500,00	R\$ 76.470.076,10	R\$ 234.000,00	R\$ 1.326.008,97	R\$ 366.580,00	R\$ 116.969.157,47
2016	R\$ 34.862.465,71	R\$ 4.487.500,00	R\$ 90.373.726,30	R\$ 228.000,00	R\$ 858.858,93	R\$ 1.015.838,40	R\$ 131.826.389,34
2017	R\$ 20.294.563,29	R\$ 2.850.000,00	R\$ 86.616.088,52	R\$ 234.000,00	R\$ 781.875,27	ND	R\$ 110.776.527,08
2018	R\$ 24.496.468,59	ND	R\$ 94.898.898,32	R\$ 1.791.296,76	ND	ND	R\$ 121.186.663,67
Total	R\$ 113.013.489,99	R\$ 12.550.000,00	R\$ 348.358.789,24	R\$ 2.487.296,76	R\$ 2.966.743,17	R\$ 1.382.418,40	R\$ 480.758.737,56

Note: ND = Not Available.

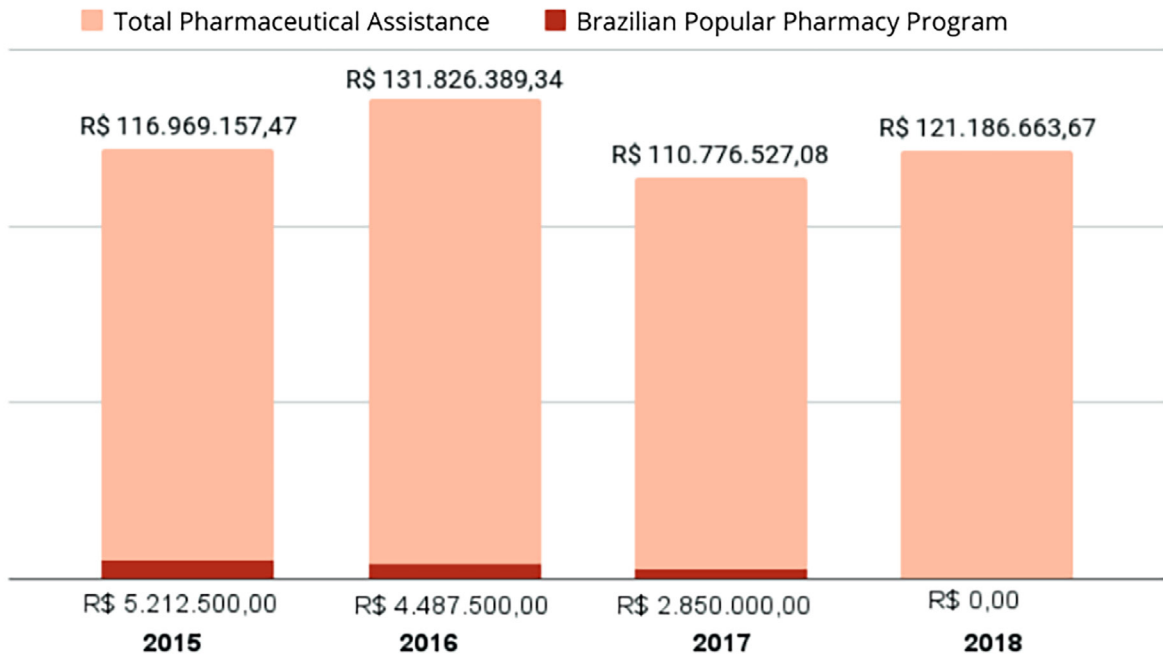
Fonte: FNS, 2023.³⁶ Accessed on nov 15, 2023.

Figure 2. Public Resources Allocated to Pharmaceutical Assistance by the National Health Fund (FNS) for Municipalities in the State of Rio de Janeiro (2015–2018)



Source: FNS, 2023.³⁶ Accessed on Nov 15, 2023

Figure 3. Public Resources Transferred from the National Health Fund (FNS) to Pharmaceutical Assistance Actions and the “Farmácia Popular do Brasil” Program in the State of Rio de Janeiro (2015–2018)



Source: FNS, 2023.³⁶ Accessed on Nov 15, 2023

Based on the actions outlined in the **Plurianual Plan (2016–2019)**³⁷ and the analysis of data regarding the executed amounts for the Pharmaceutical Assistance Guarantee Program, obtained from the Monitoring Reports,³⁸ a discrepancy was observed between the planned and executed values.

This resulted in a budget gap of nearly R\$50,000, meaning that almost fifty thousand reais were not allocated to this program. The ratio of executed to planned amounts varied throughout the period: 67.54% in 2015, 52.99% in 2016, 140.32% in 2017, and 166.81% in 2018, as shown in Table 2.

Discussion

Based on the results obtained from the National Health Fund (FNS), it was observed that between 2015 and 2018, the State of Rio de Janeiro allocated a total of R\$22,002,986,283.17 to health-related expenditures. A significant budgetary disparity was identified, with 72.42% of the resources directed to the Medium and High Complexity Care funding block. In contrast, the other blocks, Primary Care (20.13%), Health Surveillance (3.57%), and Pharmaceutical Assistance (2.18%), accounted for a much smaller share of the total funding. The results of this study reinforce findings from previous research highlighting the underappreciation of Primary Care, as it consistently receives substantially less funding than Medium and High Complexity Care.^{28, 31} Alves et al. (2024) demonstrated that, of the R\$174,860,780.76 allocated to health in the municipality of Macaé, located in the Northern Fluminense region of Rio de

Janeiro, 65.70% was directed to Medium and High Complexity Care, compared to only 23.14% for Primary Care and 3.12% for Pharmaceutical Assistance, a distribution pattern closely aligned with the findings of this study. It is also important to emphasize that, in addition to transfers from the FNS, both municipalities and states allocate their own budgetary resources to health, which may further influence these distributional profiles.^{28, 31}

Additionally, an analysis of the **Summarized Budget Execution Report (RREO)**³⁹ revealed that the State of Rio de Janeiro allocated, from its net revenue, an amount close to the minimum threshold of 12% required by Complementary Law No. 141 of 2012¹³ for health expenditures during the study period. Specifically, the state allocated 12.34% in 2015, 10.35% in 2016, 12.22% in 2017, and 12.16% in 2018.³⁹ Although Rio de Janeiro complied with the legal minimum in all years except 2016, its performance remained below that of other states. For instance, the State of São Paulo invested 12.50%, 13.19%, 13.24%, and 13.36% in health from 2015 to 2018, respectively.⁴¹ Meanwhile, the State of Ceará stood out as the one that allocated the highest proportion of its own resources to health during the same period, 14.25% in 2015, 13.90% in 2016, 14.65% in 2017, and 15.40% in 2018.⁴² These figures indicate that even the state with the highest proportional investment in health resources barely exceeded the legal minimum, highlighting the structural challenges and persistent difficulties in allocating public funds for health within the context of state-level budget management in Brazil.

Table 2. Public Resources Transferred from the National Health Fund (FNS) to Pharmaceutical Assistance Actions and the “Farmácia Popular do Brasil” Program in the State of Rio de Janeiro (2015-2018)

Year	Executed Amount	Planned Amount	Budger Difference
2015	R\$164.431.393,87	R\$243.450.046,00	- R\$79.018.652,13
2016	R\$89.774.020,57	R\$169.407.944,00	-R\$79.633.923,43
2017	R\$161.672.142,30	R\$115.218.388,00	+R\$46.453.754,30
2018	R\$155.924.886,46	R\$93.475.352,00	+R\$62.449.534,46
Total	R\$571.802.443,20	R\$621.551.730,00	-R\$49.749.286,80

Source: Monitoring Reports of the State of Rio de Janeiro from 2015 to 2018, REDEPLAN.³⁸ Accessed on nov 15, 2023.

Still within this theme, it is important to emphasize that, unfortunately, the Federal Government and the states do not always comply with the minimum funding levels required for health transfers. This situation overburdens municipalities, which are then forced to invest even more of their own resources, especially considering that many health services are decentralized. The lack of federal and state funding can directly impact the delivery of healthcare services to the population.^{26,31} Among the municipalities, between 2015 and 2018, the city of Campos dos Goytacazes, a regional reference for high-complexity care in the Northern Fluminense region, was the largest municipal investor in health, allocating an average of 54.1% of its budget to the sector.^{43,44} This illustrates the increased contribution of municipalities to health financing, in contrast to the declining participation of states and the federal government. On the other hand, when examining municipalities with lower health investments, São João de Meriti stands out for having allocated only 13.06% in 2016, below the constitutional minimum of 15%. These figures underscore the disparities in investment capacity among municipalities in the State of Rio de Janeiro and reinforce the need for greater compliance and financial support from both state and federal levels to better assist municipalities in meeting their health demands. It is also worth noting that factors such as the region's demographic and epidemiological profile, as well as the quantitative and qualitative characteristics of the local health network, are key criteria in the process of allocating health resources among states, the Federal District, and municipalities.⁵ Thus, the central reflection should not focus solely on how much is received or spent on health, but rather on how, and for which actions and services, these resources are allocated, ensuring they effectively meet the population's needs and demands.⁴⁵

Although the financing of the Unified Health System (SUS) is a tripartite responsibility, Lira²⁹ highlights that state governments hold an additional role in providing financial support to the SUS, aiming to complement healthcare actions in coordination with the other levels of government. The State of Rio de Janeiro is one of Brazil's most significant states, yet few studies have examined the

allocation of public health resources within its context.^{29,30} According to Benevides³⁰, the average per capita health expenditure in Rio de Janeiro is higher than the national average, but this is not reflected in practice, likely due to deficiencies in coordination among the three levels of government. There are numerous challenges and weaknesses faced by the health sector both nationally and within the State of Rio de Janeiro, including budgetary constraints and inefficiencies in resource management. Various media outlets have sought to highlight and denounce the consequences of these issues, such as the deterioration of hospital infrastructure,⁴⁶ shortages of medicines in public pharmacies,⁴⁷ and irregularities within the State Health Department.⁴⁸ These factors may be related, for instance, to budget reductions in key programs such as the Popular Pharmacy Program.

During the analysis of the State of Rio de Janeiro from 2015 to 2018 on the National Health Fund (FNS) portal, a total of approximately R\$22 billion in executed funds was identified. Based on the results of this study, and considering the fundamental importance of Primary Care, the main entry point for users into the Unified Health System (SUS), it was observed that this funding block accounted for only 20.13% of the total transfers made by the FNS to the state.³⁶ This proportion is similar to the national scenario, where Primary Care represented 21.7% of total health transfers during the same period (2015-2018).⁴⁹ Schneider et al. (2021) highlight that in high-performing health systems, such as those in Norway and Australia, care is typically centered on Primary Health Care, which plays a key role in reducing inequalities in access to health services.^{50,51} Furthermore, several studies^{53,54} indicate that approximately 80% of health demands can potentially be resolved within Primary Care. However, as evidenced by this study and other publications,^{55,56} the different levels of government in Brazil still allocate the majority of their resources preferentially and disproportionately to Medium and High Complexity Care, rather than to the Primary Care level, which is essential for achieving system efficiency and equity.

Based on the overview of public health resource allocation from the National Health Fund

(FNS) within the Pharmaceutical Assistance context, it was found that only 92% of the planned budget (R\$621,551,730.00) was actually executed (R\$571,802,443.20). In this scenario, a notable finding concerns the Popular Pharmacy Program, which experienced a 45.32% reduction in its budget, decreasing from R\$5,212,500.00 in 2015 to R\$2,850,000.00 in 2018. A similar trend was observed at the national level, where the program's budget declined from R\$20 billion in 2015 to R\$18.6 billion in 2016, representing a reduction of approximately 7%.^{57, 58, 59} This cut in program funding may be linked to the budgetary restrictions imposed by Constitutional Amendment (EC) No. 95 of 2016, which froze public spending for 20 years and resulted in an estimated budget loss exceeding R\$22.5 billion.^{58, 60} The data presented in this study, particularly concerning the Pharmaceutical Assistance sector, including the Popular Pharmacy Program and the Pharmaceutical Assistance Guarantee Program³⁸, which showed a budget deficit of R\$49,749,286.80 (8% below the planned amount) between 2015 and 2018, reveal important implications. These shortfalls suggest that essential actions such as the provision of free or subsidized medicines and medical supplies, the structuring of pharmaceutical assistance in medicinal plants and herbal medicine programs, the support of distribution hubs, and the ****operation and expansion of state pharmacies (RI-OFARMES)****^{38, 59} may have been discontinued or inadequately implemented, thereby limiting access to pharmaceutical services for the population of the State of Rio de Janeiro.

It is noteworthy that, to date, there are no published studies addressing this specific topic within the context of the State of Rio de Janeiro.

Additionally, some limitations of this study should be acknowledged. One major limitation was the lack of descriptive and quantitative information regarding each funding area and its respective activities (for example, *how, when, and with what resources*), as such detailed data were not available on the FNS Portal.

Moreover, given that the study covered a relatively short period of four years (2015-2018), it was not possible to conduct a statistical time-series analysis.⁴⁰ However, a descriptive trend was observed,

indicating a form of budgetary compensation, that is, an increase in health resources (e.g., in 2017 and 2018) following a period of reduced allocations (e.g., in 2015 and 2016).

Finally, this study sought to contribute to the dissemination of information regarding the allocation of public health resources in the State of Rio de Janeiro between 2015 and 2018, by presenting an overview of which funding blocks received the highest and lowest financial allocations from the National Health Fund (FNS), as well as the budgetary situation of specific Pharmaceutical Assistance programs, such as the Popular Pharmacy Program.

Furthermore, studies of this nature underscore the importance of ongoing research utilizing health data repositories such as the FNS, which serve as management tools capable of supporting critical analyses that promote rational, transparent, and efficient decision-making in public health administration.

Conclusion

From this study, it was possible to identify the distribution and allocation profile of public health resources in the State of Rio de Janeiro between 2015 and 2018, highlighting the significant and disproportionate amount directed to Medium and High Complexity Care compared with other health sectors, such as Primary Care, which accounted for only about 20% of all resources transferred from the National Health Fund (FNS). It is important to emphasize that Primary Care serves as the main entry point for users into the Unified Health System (SUS) and has the potential to resolve the majority of community health demands.⁵²⁻⁵⁴ However, numerous historical impacts and structural legacies persist in Brazil, a country that has traditionally favored a curative and hospital-centered model of care.⁶¹ This historical orientation helps explain the lack of prioritization and investment in Primary Health Care, a trend clearly reflected in the results of this study.

Additionally, it was observed that between 2015 and 2018, the State of Rio de Janeiro experienced budgetary reductions affecting several programs linked to Pharmaceutical Assistance, such as the Popular Pharmacy Program, whose budget declined

from R\$5.2 million in 2015 to R\$2.8 million in 2017. The promotion and maintenance of services such as access to medicines and pharmacotherapeutic care provided by licensed pharmacists within the SUS are among the many essential responsibilities that must be organized and supported across all levels of health management. This is particularly important given that a large portion of the Brazilian population depends exclusively on the SUS and requires guidance on the rational use of medicines. Unfortunately, there are still many challenges associated with pharmaceutical services in the SUS, including the absence of pharmacists in several Primary Health Units and frequent shortages of medicines in some municipalities of the state.⁶² These issues may be directly related to the budgetary reductions and funding constraints identified in this study.

In summary, the debate surrounding the financing of the Unified Health System (SUS) reflects the complexity and challenges inherent in managing a universal and free healthcare system within a country of continental dimensions and diverse socioeconomic conditions. It is essential to emphasize that transparency and accessibility of data are crucial to fostering informed discussions in health management and ensuring effective social oversight. Therefore, the pursuit of rationality and efficiency in the public financing of health actions is indispensable to guaranteeing universal access to healthcare, without compromising the financial sustainability of a nation marked by its cultural diversity and, above all, by its distinct regional health characteristics and needs.

Authors' Contributions

LFV: data collection and tabulation, manuscript preparation, and organization of the first draft; GHS: data collection and tabulation; IPDG: manuscript preparation, organization of the first draft, revision, and preparation of the final version.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

Responsible Reviewers

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