

# Public cost management in the Department of Health: A comparative study before and after Covid in a small municipality

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Euselia Paveglio Vieira<sup>1</sup> and Inara Caroline e Lima Mastella<sup>2</sup>

#### **ABSTRACT**

Including an internal policy in relation to cost management allows the manager to adopt effective strategies, including in the public sector. Thus, the present study aims to analyze the costs of the Health Department of a small municipality in order to enhance the use of resources in different scenarios. Thus, the study has as a basic question to identify the contribution of cost indicators in the management of the resources of the Health Department of a small municipality, including in times of pandemic crises. For data collection, interviews were conducted in a non-structured way, using a pre-defined agenda, with observation to identify the structure and functioning of the Secretariat, in addition to the use of accounting and health reports with physical-financial data. Therefore, based on the collection of information, it was possible to map the Secretariat's processes, determine the transfers and the allocation of resources to the respective activities, identifying the differences before and after Covid-19, the average revenue and expenditure per capita. It is found that cost management in the public sector needs more attention and that its importance stems from the need for efficiency in public administration, and management indicators help in decision making.

Keywords: Management, Public Costs, Indicators, Efficiency, Health.

Academic institution: Professor UNIJUI - Regional University of the Northwest of the State of RS

ORCID: https://orcid.org/0000-0001-5927-2703

Academic institution: UNIJUI - Regional University of the Northwest of the State of RS

ORCID: 0009-0005-2427-4326

<sup>&</sup>lt;sup>1</sup> Highest degree: PhD in Administration UFMS

<sup>&</sup>lt;sup>2</sup> Highest Degree of Education: Bachelor of Science in Accounting



## **INTRODUCTION**

Cost management plays a fundamental role in organizations, due to the interconnection of markets with globalization, which consequently requires managers to have a good internal policy in relation to costs. According to Martins (2018), cost accounting for planning and control serves to determine models and budgets, which are fundamental in the forecast and subsequent analysis of the results obtained.

With a similar bias, in the public sector, having structured cost accounting also gives the manager the planning of actions. However, because it is a public entity, and thus with a different corporate purpose from other organizations, the cost system contributes beyond this panorama, that is, it makes it possible to know how the expenditure of public resources occurs, in order to avoid distortions and inefficiency in its use. In this context, Mauss & Souza (2020) clarify that the cost statement serves to support decisions to outsource or not public services, suppress expenses and identify the need to replace inefficient equipment, that is, it supports decision-making with a view to the best economic result.

The Coronavirus (Covid-19) pandemic caused a series of immediate changes in management, specifically in public health, which was exposed due to the significant increase in the demand for resources. Given this scenario, having control of expenses has become essential to have assertiveness of actions, since financial resources are scarce.

From this perspective, the study has as its central question to understand how cost indicators can contribute to the management of the resources of the Health Department of a small municipality, including in times of pandemic crises? Therefore, the objective is to analyze the costs of the Health Department of a small municipality in order to enhance the use of resources and the respective control in different scenarios.

Thus, it is emphasized that even after 21 years of the enactment of the Fiscal Responsibility Law - LRF, which requires the institution of a cost system in the Public Administration, it has not yet been established in practice, therefore, it is justified to carry out the study, which also aims to contribute in times of crisis such as the Covid-19 pandemic.

It should be noted that the choice of the Municipality occurred as a result of the fact that, in 2020, it ranked 3rd in the classification of the best accounting information in the country, according to SICONF – Accounting and Tax Information System of the Brazilian Public Sector.

# THEORETICAL FRAMEWORK

Accounting at the head of organizations stands out because it is inserted in the management process in its various areas of knowledge. Thus, public accounting is one of the segments of Accounting Science, being closely related to the function performed by the State before society.



What underpins the activities of the State is the preponderance of the collective interest that prevails over the private interest, so the entire institution of public law dictates supervises this pillar (Nohara, 2020).

In order for public service to occur, there is public administration, which consists of the technical and structural apparatus, being divided into direct and indirect administration (Arruda and Paixão, 2020). The direct Public Administration is arranged with a hierarchy of power, which means that the departments have delimitation in their attributions, therefore, they form a chain structure with submission between the sectors (Kohama, 2016).

Cost accounting, on the other hand, has undergone evolution, and initially its objective was to determine the cost of industrial products and later it became a tool for measurement and management control (Padoveze, 2015). In the public sphere, cost accounting has its most timid trials than in relation to private organizations, pointed out by Mauss and Souza (2020), that there are even laws that deal with the subject, but that do not support how to actually implement it.

Thus, it is also important to understand their role in relation to public administrations. And, in this sense, Lima (2018) points out that the effective identification of costs allows society to control the quality of public activities. In this way, the establishment of the system of costs applied to the public sector grants managers and society parameters to analyze the results of the acts practiced by the federative entities.

Therefore, Mauss and Souza (2020) allude that through the measurement and management of costs, the administrator is able to know the value of each service and thus have subsidies to conduct the government in a more conducive way. Regarding the insertion of cost accounting in the public sphere, some laws have been drafted, and they will be presented in the course of the year. From this point on, the approach begins with Law 4.320/1964, which is the basis of all legal systems that surround public accounting. This important law states that industrial services must keep their costs in keeping records in addition to the patrimonial and financial records (Brasil, 1964).

In the field of action of the organization of the Federal Administration, Decree-Law No. 200/1967, in its article 79, is responsible for accounting as to the disclosure of costs in a way that makes it possible to conceive their effects. And with regard to personnel administration, the legislation emphasizes that mechanisms for evaluation must be established that subject the public sector to levels existing in the private sector, in such a way that costs do not overlap in an unsustainable way (Brasil, 1967).

With a subsequent edition, Decree No. 93,872/1986 once again reinforces the importance of financial control through cost management at the federal level, ratifying article 79 of Decree-Law No. 200/1967, and adding more information (Brasil, 1986). Likewise, Mauss and Souza (2020) point



out that the Federal Constitution imposes that the activities developed by federative entities occur in line with the principle of economy, thus, it is strictly linked to informational cost management.

In addition, reinforcing the accounting obligation to manage public sector costs, Law 10.180/2001, which deals with federal planning and budget systems, also emerges that the accounting system must record and evidence "the costs of the programs and units of the Federal Public Administration" (Brasil, 2001). It also points to the control of costs when contracts are signed with the remittance of resources, highlighting that prior appraisal must take place "so that the amount of resources involved in the operation is compatible with its object" (Brasil, 2001).

Therefore, the reflection of the advent of the LRF, published in 2000, which brought more severe impositions to the public administration, triggering a rupture of what had been until now in levels of control, and consequently held more accountable the acts of public administration (Mauss & Souza, 2020). Therefore, seeing that the public sector still lacked information for government management, the matter on costs is brought in the LRF, in its article 50, § 3 with the following text: "the Public Administration shall maintain a cost system that allows the evaluation and monitoring of budgetary, financial and asset management" (Brasil, 2000).

According to Monteiro and Pinho (2017), as much as Law No. 4,320/64 already covered the disclosure of costs by accounting, there was a lack of depth on the subject, so they understand that the LRF brought a greater openness on the subject. Within the scope of the Federal Government, it is where the greatest improvements in the matter can be noted, according to the cost booklet of the federal administration, Ruling No. 1078/2004 of the Federal Court of Accounts, obliges the federal public administration to implement a cost system that "allows, among others, the evaluation and monitoring of the budgetary and financial management of those responsible" (Brasil, 2012, p. 37).

And, also according to the booklet, the next steps were, in 2005, the appointment of the Interministerial Commission, which proposed to the National Treasury Secretariat - STN the preparation of studies with the purpose of creating the cost system; in 2008, the Technical Chamber of Expenditure Quality (CTQG) was formalized; in 2009, Decree No. 6,944/2009 (later revoked) was issued, which points to the need to improve the federal administration; in 2010, the Federal Government's cost system was approved by its agencies; and finally, in 2011, the Federal Government's cost system was implemented, being regulated by ordinances 157 and 716 of the National Treasury Secretariat (Brasil, 2012).

This result is caused by the successive disruptions present in the public sector, therefore, another milestone that demonstrates great effects is the process of convergence of accounting standards, according to Mauss and Souza (2020), they were edited in 2008 and with subsequent changes, but they are not yet overcome by employees in the accounting area. With this, it is evident that public agencies run into slowness, because, as has been exposed, there are laws that address the



subject, but, however, as stated by Mauss and Souza (2020, p. 14) "practice has shown that public entities that have adopted cost systems have not done so in a conceptually well-structured way. [...] even so, [...] it has already made it possible to obtain more positive results [...]".

It should be noted that the main guide for structuring the cost system comes from NBC T 16.11, which specifically addresses the subject. With regard to the appropriation of costs, it can occur in the following ways: direct costing; variable costing; absorption costing; activity costing; and full costing (Mauss & Souza, 2020). Thus, regarding continuous production, NBC T 16.11 conceptualizes that this system consists of producing demands of a continuous nature, and when it is by production on demand, it refers to the service or product demanded, applied more when related to works and improvements (CFC, 2011).

To define the costing system, Mauss and Souza (2020) mention that the predetermination of costs is focused on management, serving as an analysis tool, as they are the target cost (estimated) and the standard cost, which are used in the planning of the PPA, LDO and LOA and in the appreciation of the results. The target cost or estimated cost refers to the projected cost with a bias to support the development of budgets (CFC, 2011). And, according to Martins (2018, p. 297), the standard cost "is often understood as the Ideal Cost of production of a particular good or service".

With regard to costing methods, that is, the form of appropriation of costs is presented in sequence for each existing type, and at first direct costing is conceptualized, which is the method by which all variable or fixed costs are used without apportionment, excluding indirect costs not related to the good or service (Mauss & Souza, 2020).

While in variable costing, according to Viceconti and Neves (2018), as its name suggests, variable costs are used, disregarding fixed costs, which are recorded with the expenses of the period, however, it conflicts with accounting principles, therefore, its usefulness is for managerial purposes. In turn, Martins (2018, p. 22) conceptualizes absorption costing as "the method derived from the application of Generally Accepted Accounting Principles [...]. It consists of the appropriation of all production costs to the goods manufactured [...]".

Regarding full costing, NBC T 16.11 mentions that expenses with products and services are included in the calculation together with costs (CFC, 2011). Regarding costing by activity, Mauss and Souza (2020) state that this model is the most complex, because it requires the detailing of the processes that encompass a certain product. Corroborating, Martins (2018) points out that ABC costing has its origin in reducing the inference of cost allocation, in addition to being a tool for cost management.

Regarding the best costing method, several authors claim that the ABC is capable of satisfying the needs of the public sector. Thus, one of the first defenders and scholars who addressed the subject was Alonso (1999), who emphasized that ABC costing meets the requirements for the



implementation of a cost system of public administration, firstly, due to the structure that composes it, which contributes to the elaboration of cost centers and the high fixed and indirect costs, which make it difficult to use an appropriate method for apportionment.

Martins (2018, p. 279) also positions himself in favor of activity-based costing, stating that "it is possible to use the ABC in financial institutions, public service concessionaires [...], hospitals, schools, etc. In short, activity and costing objects are found in all organizations, including non-profit ones". And more contemporaneously, Mauss and Souza (2020) also point to ABC costing as the most appropriate method for use in the public sector, due to the *mix* of services and the mistakes that apportionment procedures can cause in other methods.

Therefore, in order to use this method to calculate costs, there are other elements that need attention, thus, Martins (2018, p. 83), brings the concept of activity for identification purposes in ABC costing, which "is composed of a set of tasks necessary for its performance". In addition to mapping activities, cost drivers are used, which have the ability to link costs to your activities. In this way, Mauss and Souza (2020, p. 55), ratify that "in the first stage, called "costing of activities", the costs (resources consumed) are directed to the activities. In the second stage, called "object costing", the costs of the activities are attributed to products, services and customers". In order to elucidate the functioning of the ABC, figure 1 is presented, which represents the allocation mechanism.

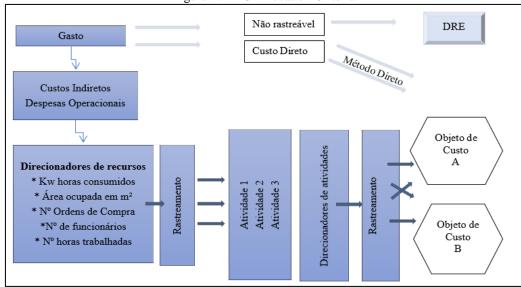


Figure 1. ABC Allocation Criteria

Source: Mauss and Souza (2020, p. 59).

As shown in figure 1, the expenses composed of indirect costs and operating expenses go through the drivers, which are tracked by activities until they reach the cost object, the expenses that are not traceable go to the P&L and the direct costs are allocated to the objects.



### **METHODOLOGY**

Regarding the classification of research, it is of applied origin, which means that research is determined to solve feasible problems (Vergara, 2016). Regarding the objectives, the study was carried out in a descriptive and explanatory way. This fact arises because descriptive research is based on the exposition of the circumstances and aspects of the object under examination (Gil, 2019). And, as for explanatory research, it occurs because there is a need to explain the processes, therefore, it aims to elucidate the reasons that make up certain events (Vergara, 2016). As for the way of approaching the problem, it is qualitative, according to Martins and Theóphilo (2016), the descriptive predominance is a basic attribute in this type of research, and there may be the characterization of individuals and episodes, even the reproduction of narratives.

In addition, in relation to the technical procedures, it is classified as bibliographic, documentary and case study. According to Marconi and Lakatos (2021, p. 49), the bibliographic research "[...] It is made based on texts, such as books, scientific articles, critical essays, dictionaries, encyclopedias, newspapers, magazines, reviews, summaries.

With regard to the documentary study, it is based on documents for the collection of information, using primary sources (Martins & Theóphilo, 2016), that is, data was extracted from the original documents, which were not subject to examination and which this in turn is up to the author to carry out, thus, in the study, information was collected through accounting reports, service reports, procedures performed at the secretariat and other possible documents available at the Health Secretariat.

Finally, the research is also classified as a case study, because it is the investigation of the facts with the indication of prognosis (Gil, 2019). It is also characterized by a broad analysis of an event, which in turn requires the researcher to use several sources, including: document analysis, observation, and interviews (Gil, 2019). Therefore, such concepts justify the classification because the research was carried out in the Health Department of a small municipality in the Northwest of the State of Rio Grande do Sul.

### ANALYSIS OF THE RESULTS

This chapter results from the collection and analysis of data, which includes the examination of the results obtained. Therefore, the amounts of revenues and expenses for the years 2019, 2020 and from January to July 2021 were calculated.



# COMPARISON BETWEEN REVENUES AND COSTS BEFORE AND AFTER THE PANDEMIC

This topic contains the analysis of the data collected, with the confrontation of the information, making a cut of important elements, with this in chart 1 there are the impacts generated in the main revenues in the study period.

Table 1. Impacts on revenues

Year	2019	2020	2021 (Jan/Jul)
Source of Funds	Recipes	Recipes	Recipes
ASPS – Public health actions and services	2.124.370,03	2.194.435,73	1.647.867,59
FUNDING - Other programs financed by fund-to-fund transfers	0,00	271.388,60	1.129,12
Primary Care – PIES	36.030,64	89.623,80	37.821,54
Basic Pharmacy / Medicinal Plants and Herbal Medicines / Diabetes Mellitus / Diapers and other supplies	3.956,61	7.907,91	3.733,65
PSF / Oral Health / PACS	30.055,52	97.671,40	40.090,87
Other municipal revenues applied in Health	0,00	30.663,18	21,75
Total collection in the periods	2.701.536,67	3.243.809,27	1.990.024,76

Source: Accounting report (2021)

In analysis, an increase of 3.30% in ASPS revenues is identified, from 2019 to the year 2020, in percentage it is not so representative, but as this is one of the main sources of revenue, it makes it reach the amount of R\$ 70,065.70 in value. Among all the main contributions, it can be seen that in 2020, there was the implementation of costing values (fund to fund), which did not exist in 2019, this amount originates from the transfer of resources from the union, making a total of R\$ 271,388.60, however, in relation to the year 2021, a reduction in the amount transferred is identified.

Primary care-PIES, a state resource, had an increase of 59.80%, doubling the amount transferred in 2020 compared to 2019, and until July 2021, the revenue has also exceeded the amount transferred in 2019. The amount transferred to the basic pharmacy doubled from 2019 to 2020, and in 2021, until July, it had almost reached the total collected in 2019, to equalize with the same amount as last year, 52.79% is still missing.

Of the amount transferred from the State of PSF / Oral Health / PACS, in 2021 it has already exceeded the resource received in 2019 by 33.38%, and compared to the year 2020 the result is different, because there is still 58.96% to reach the same amount, which means that the collection of 2021 corresponds to only 41.04% of the year 2020. Through this, it is identified that the year 2020 proved to be much higher than the other two years, since in relation to 2019 the amount received more than tripled.

Also, it is noted that the municipality, in 2020, had a contribution of resources classified as other municipal revenues applied to health, which are resources originating from Complementary Law 173/2020, which, in addition to stipulating other regulations, allocated resources to States and Municipalities. Like revenues, table 2 presents the impacts generated in expenses.



Table 2. Impacts on expenses

GENERAL ADMINISTRATION	2019	2020	2021 (jan/jul)
Total of the subfunction in the periods	180.413,37	455.685,82	203.598,46
Main expenses that impacted	2019	2020	2021 (jan/jul)
3.1.90.04 - Fixed-term hiring	0,00	58.578,92	60.587,18
3.1.90.11 - Fixed salaries and benefits - civilian staff	141.234,82	173.367,01	97.212,67
3.1.90.13 - Employers' obligations	32.826,98	54.683,52	18.070,22
3.3.90.30 - Consumables	837,90	32.601,30	25.447,35
4.4.90.52 - Equipment and permanent material	0,00	100.480,00	0,00
PRIMARY CARE	2019	2020	2021 (jan/jul)
Total of the subfunction in the periods	2.720.021,39	2.339.541,45	1.216.534,24
Main expenses that impacted	2019	2020	2021 (jan/jul)
3.1.90.04 - Fixed-term hiring	185.914,71	276.707,55	210.794,83
3.3.93.39 - Other third-party services - PJ	441.590,56	0,00	0,00
HOSPITAL AND OUTPATIENT CARE	2019	2020	2021 (jan/jul)
Total of the subfunction in the periods	119.402,32	549.680,33	317.259,28
Main expenses that impacted	2019	2020	2021 (jan/jul)
3.3.93.39 - Other third-party services - PJ	0,00	417.432,73	182.541,26
PROPHYLACTIC AND THERAPEUTIC SUPPORT	2019	2020	2021 (jan/jul)
Total of the subfunction in the periods	310.048,12	438.757,55	217.572,16
Main expenses that impacted	2019	2020	2021 (jan/jul)
3.3.90.32 - Free material, goods or services	972,98	57.931,27	20.109,10
3.3.90.39 - Other third-party services - legal entity	4.400,00	17.160,00	12.373,44
3.3.93.32 - Material, goods or serv. For free distr	226.106,91	291.504,94	145.389,89
HEALTH SURVEILLANCE	2019	2020	2021 (jan/jul)
Total of the subfunction in the periods	145.995,95	151.149,83	83.573,29
EPIDEMIOLOGICAL SURVEILLANCE	2019	2020	2021 (jan/jul)
Total of the subfunction in the periods	32.339,44	25.668,66	4.402,99
Main expenses that impacted	2019	2020	2021 (jan/jul)
3.3.90.30 - Consumables	27.989,35	21.212,65	4.402,99
Grand total of expenses in the periods	3.508.220,59	3.960.483,64	2.042.940,42

Source: Expense balance sheet (2021).

At this point, it is identified that spending on the general administration subfunction implied, compared to 2019, an increase of 152.58% and 12.85%, respectively in 2020 and 2021. This was caused by the increase in accounting with fixed-term hiring, and in 2019 there were no expenses in this element of expense, so in 2020 around 58 thousand reais were spent, and in 7 months of 2021 it has already exceeded this amount. There was also an increase in salaries and fixed benefits in 2020, as well as in employers' obligations, but in 2021 there is already a decrease in these expenses.

Also in this subfunction, it can be seen that there was an increase in the expenses of consumables, which, according to the expense balance sheet, correspond to the acquisition of cleaning material and hygiene products, protection and safety material, and hospital material. And finally, the most significant impact was the acquisition of a vehicle from the 2018/2019 popular consultation, in the amount of R\$ 99,400.00, paid with resources from the popular consultation and with complementation of values from the sale of assets and free resources. And the difference of R\$ 1,080.00 is linked to the acquisition of two digital thermometers for temperature measurement, therefore, directly linked to the fight against the pandemic.



In the primary care subfunction, there was a decrease in total expenditures, and the main effect is the reallocation of expenses with the application modality 93, which corresponds to the use of resources in a public consortium, which refer to the provision of medical-hospital, dental, and laboratory services, and as of 2020 they became part of the hospital and outpatient care subfunction.

In addition, another element calculated was the overspending of R\$ 90,792.84 in fixed-term hiring, from 2020 to 2019, that is, it had an increase of 48.84%, while the value calculated in 2021 also exceeded the value of 2019, but by 13.38%. With regard to the prophylactic and therapeutic support subfunction, the elements of expenses that had an impact on the difference between the years were material, good or service for free distribution, both of direct application and acquired by the consortium, and the contracting of other services from third parties - legal entities.

And as for the surveillance subfunctions had a decrease, the sanitary with a smaller variation between the years, but the epidemiological in 2021 had a reduction of 86.39% compared to 2019 and 82.85% in 2020, even though the analysis period does not refer to the entire year, it is seen that these expenses are well below what was done in previous years.

Chart 3 culminated in the identification carried out in the expense balance sheet, with the intention of finalizing the analysis of the behavior of expenses, therefore, it elucidates the actions aimed exclusively at combating the coronavirus by subfunction.

Table 3. Expenses in actions to control and combat Covid-19

Subfunction/Program/Action	2020	2021
General administration		86.034,53
Citizen health care	123.884,75	
Actions to control and combat Covid - 19		
Primary care		46.884,01
Citizen health care	29.606,92	
Actions to control and combat Covid – 19		
Hospital and outpatient care		60.903,92
Citizen health care	1.443,74	
Actions to control and combat Covid – 19		
Prophylactic and therapeutic support		
Control and distribution of medication	22.832,98	11.343,70
Actions to control and combat Covid - 19		
Epidemiological Surveillance		
Health surveillance	7.257,50	4.191,14
Actions to control and combat Covid – 19 in schools		
Grand total	185.025,89	209.357,30

Source: Expense Balance Sheet (2021)

This table alludes that the total amount spent in the year 2020, which can be directly identified with the pandemic, reaches the amount of 185 thousand reais, which is lower than the amount spent until July 2021. It is also reported that the total amount of 60 thousand reais was



transferred to the reference hospitals in care in the region, of which the municipality is part, through a subsidy, being allocated to hospital and outpatient care.

And in order to have a parameter of the average resources and expenditures on health, chart 4 was elaborated, based on the population, according to data obtained from the IBGE. However, it should be noted that for the year 2021, it was necessary to make a projection, as the year is still ongoing. In this way, the amounts of income and expenses were divided by 7 and multiplied by 12 months.

Table 4. Average health income and expenditure per capita

Description/Year	2019	2020	2021 (projection)
Average Revenue Per Capita	1.279,74	1.536,62	1.616,05
Average expenditure per capita	1.661,88	1.876,12	1.659,02
R-D Difference	(382,14)	(339,50)	(42,97)
D/R Ratio	129,86%	122,09%	102,66%

Source: Expense balance sheet (2021) and IBGE (2020)

In this survey, it is noted that the average revenue and expenditure increased between the years, although the scenario was slightly different in 2021 when compared to 2020 in relation to expenses.

Regarding the values identified in table 4, it is informed that according to the data obtained from SIOPS, the expenditure values for 2019 are R\$ 1,657.74 (SIOPS) and in 2020 R\$ 1,873.34 (SIOPS), demonstrating the proximity of the results obtained.

In this way, when the comparison occurs with revenues during the period alluded to, it can be seen that the growth from 2019 to 2020 was 20%, from 2020 to 2021 it was 5%, that is, confirming the projection there will be growth, but in a smaller proportion. When the same analysis of expenses is carried out, it is seen that from 2019 to 2020 the increase was 13%, a percentage lower than revenues, and from 2020 to 2021 a decrease is expected.

In addition, it is possible to determine the relationship between expenditure and revenue, and in 2019 expenses exceeded revenues by 29.86%, in 2020 the result was 22.09%, while in 2021, if this projection is confirmed, the ratio will only be 2.66%, that is, there is almost equivalence between the values.

To discuss the subject more broadly, chart 5 is presented, which contains the list of procedures performed at the UBS for the years 2019 to 2021, remembering that the latter includes the period from January to July.



Table 5. Production Summary

Description	2019	2020	2021
Individual service	8.148	6.592	4.875
Individual dental care	1.237	595	511
Collective activity	171	121	69
Food consumption markers	1	0	0
Individualized procedures	13.510	8.021	7.173
Vaccination	119	890	402
Home and territorial visits	17.534	4.968	1.388
Total production	40.720	21.187	14.418

Source: e-SUS Report (2021)

Table 5 presents the compilation of the data contained in the e-SUS report and according to information passed on by the Health Department, the vaccination data do not reflect the totality of the vaccines applied in the years 2019 and 2020, due to the non-mandatory insertion of the information in the aforementioned system.

And about individualized care, according to the words of the administrative agent of the Health Department "there are all medical, nurse, nutrition, physiotherapy and psychology consultations".

Therefore, analyzing the data, it is found that the attendances had a sharp reduction compared to the year 2019, this is due to the pandemic, where services were reduced so that the health system was available for cases from Covid-19. Thus, there was a reduction of 47.97% in the total number of procedures performed in 2019 to 2020.

# MANAGERIAL COST INDICATORS FOR DECISION

The last section comprises the main indicators that can be used for managerial purposes. In this way, it brings up a series of graphs which serve for the manager to have as a reference in decision making. Figure 2 shows how the composition of revenues for application in health is formed, that is, it shows how much the Municipality, the State and the Union spend on health.





Valores transferidos por fonte de recurso - Covid 2021 Custeio - Atenção Básica (4500) 0.00 20.584,93 CUSTEIO - Outros programas financiados por transferências fundo 271.388,60 1.129,12 a fundo (4511) INVESTIMENTO - Outras transferências (4512) 3,475,10 20,76 Atenção Básica - PIES (4011) 5.000.00 0.00 Outras receitas municipais aplicadas em Saúde (4001) 15.386.79 17,50 Total 295.250.49 21.752,31

Source: Trial balance by source of funds (2021)

Thus, it is verified that the largest resource is the Municipality's, because it is up to it to apply its resources in health, since the main function of the basic health unit is to be the user's gateway to the health system, where it works with the reception to identify and solve the problems demanded by the patient. Thus, in the composition of resources, municipal revenues point to being above 50% in all the years analyzed, and the year that had the lowest representativeness was 2020 due to the increase in federal and state transfers. Also, it is identified that in the period analyzed from January to July 2021, own revenues reach 4% in relation to the percentage of 2019, this confirms that the values calculated in ASPS for 2021 are higher than the years 2019 and 2020.

To corroborate what was identified in the graph in figure 2, there are the transfer values for application in expenses related to Covid-19. In this way, the amount transferred to the Municipality to cover Covid expenses, almost makes up the amount of 300 thousand reais, corresponding to 9.10% of the revenue calculated in 2020 of R\$ 3,243,809.27, and in relation to the executed expenditure that corresponded to 7.45%.



Regarding the amount transferred until July 2021, it is noted that it tends not to reach the values calculated during the year 2020, due to being around 22 thousand reais, in addition, according to the accountant's report "the values of investments, fund-to-fund costing, other municipal revenues applied in health, refer to revenues from the application of existing bank balances and not from transferred amounts".

State transfers peaked in 2020, as did those from the Union, and as for the composition of revenues in 2019 and 2021, it also showed similarity, which means that there were more efforts in 2020, as it interfered in the formation of resources. In relation to figure 3, the data presented correspond to the composition of the expenditure, showing the percentage spent by nature of the expenditure and the composition of the expenditure on Covid-19 by subfunction.

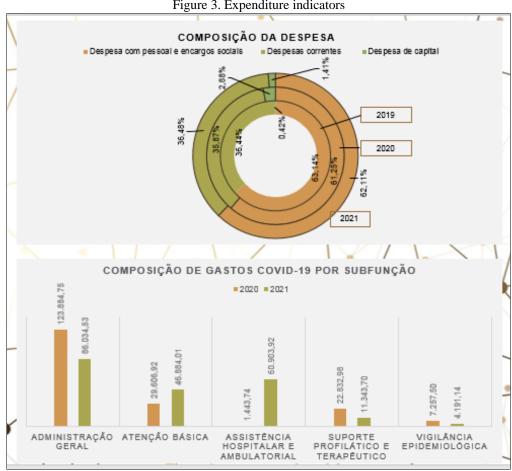


Figure 3. Expenditure indicators

Source: Expense Balance Sheet (2021)

In the expenditure composition chart shown in figure 3, it is identified that no significant change occurred, only capital expenditure, which are those from investments, increased in 2020 and 2021. In addition, expenses with personnel and social charges and other current expenses remained balanced.



When analyzing the composition of expenditure by subfunction related to Covid-19, it can be seen that primary care and hospital and outpatient care increased in 2021 compared to 2020. Regarding the considerable increase in hospital and outpatient care, the explanation lies in the transfers made to hospitals in the region, which totaled 60 thousand, so that it could be assisted in the care of more serious cases of Covid-19, which required hospitalization.

Thus, in this section the main data for management were presented, in order to contribute with information for possible planning actions of the public entity, given the importance of knowing the numbers behind the management.

#### **CONCLUSION**

The public sector is permeated by principles that are part of the Federal Constitution, which is the main legal norm that surrounds the Democratic Rule of Law. Therefore, it is highlighted that efficiency, one of the principles, aims to ensure that the provision of public services is carried out in a way that generates greater satisfaction of the population.

It is in this scenario that cost management is introduced in the public sector, through this tool it is possible to manage resources in a purposeful way. Furthermore, management indicators facilitate the manager in choosing actions, serving as a subsidy to adopt the best alternative in the face of the existing panorama.

In this way, the study went through some stages, identifying the activities developed before and after the pandemic, thus demonstrating the main interferences that the pandemic caused in the local public health system. Regarding the calculation of transfers and the allocation of resources for activities, tables were made with revenues by source of funds, since there are specific rules for their application, and with expenses, the existing structure was used, which consists of the division by subfunctions, data extracted from the expense balance sheets.

With this survey, it was possible to analyze the use of resources before and after Covid, identifying that there was an increase in the transfer of resources, mainly from the Union, in 2020, and that the period from January to July 2021 the increase in value was in the ASPS. With the summary of production, a decrease in the activities developed by the Health Department was visualized, with the total attendances in 2020 falling by half compared to 2019.

When comparing the values by group of nature of expenditure, there was not much change between the groups, however these data serve for the manager's analysis in a broad way how the resources are applied, because they demonstrate the amount spent on personnel, other current expenses and capital. In this way, it can be seen that more than 60% of the resources are for the payment of the servers allocated to the secretariat, including both the administrative part and the health professionals.



In the composition by subfunction, it is alluded that in order to control the use of resources for spending on Covid-19, specific controls were created, enabling the identification of expenses, and the total in 2020 was R\$ 185,025.89, corresponding to 4.67% in relation to total health expenditures, and that in 2021, until July, the scenario was 10.25% compared to the total spent.

In general, the most significant expenditures from 2019 to 2020 occurred in the subfunctions: general administration; hospital and outpatient care; prophylactic and therapeutic support. Thus, in the total amount it points to an increase of 11.42% between 2019 and 2020, while the analyzed period of 2021 tends to be below the amounts spent in the previous years alluded to here.

With this, it can be identified that despite the decrease in activities, the amounts spent on health after Covid-19 increased, but without the need to directly identify the actions resulting from the prevention of the pandemic. In future studies, it can be analyzed how to use the existing accounting structure to set up the activity-based costing system, something that is plausible, which allows measuring the cost of the public service, thus expanding the contribution to decision making.

# 7

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